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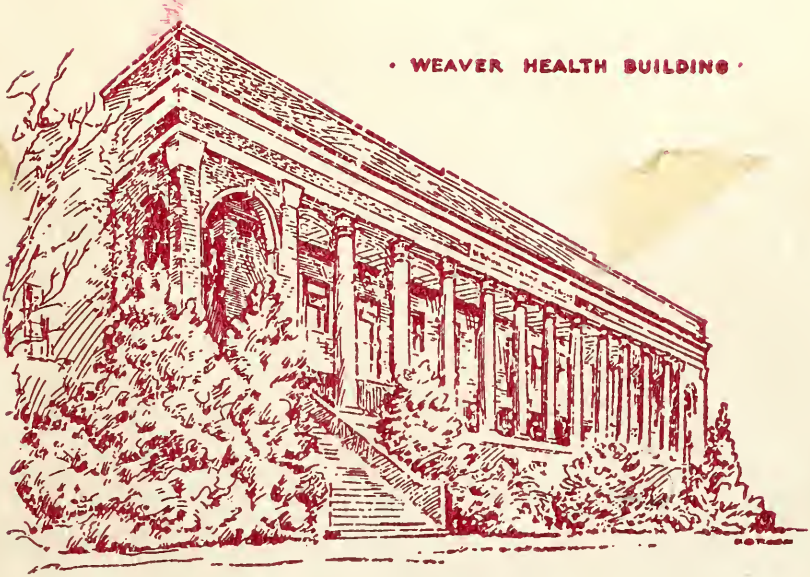
KENTUCKY STATE COLLEGE



· WEAVER HEALTH BUILDING ·

EASTERN KENTUCKY REVIEW

Vol. 44 1954 No. 1

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A STANDARD COLLEGE

Approved by

Kentucky Association of Colleges and Secondary Schools
American Association of Colleges for Teacher Education
Southern Association of Colleges and Secondary Schools
National Business Teacher Training Institutions
American Association of University Women

and

American Council on Education

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1954—CALENDAR—1955

FIRST SEMESTER

September 14	Tuesday	8:30 a.m.	Classification tests for first semester freshmen
September 15	Wednesday	8:30 a.m.	Classification tests for first semester freshmen
September 16	Thursday	8:00 a.m.	Registration of freshmen
September 17	Friday	8:00 a.m.	Registration of sophomores and juniors
September 18	Saturday	8:00 a.m.	Registration of seniors and graduate students
September 20	Monday		Classes begin
September 27	Monday		Last day to enter a course for credit with a reduced load
October 25	Monday		Last day on which a course may be dropped without a grade
November 17	Wednesday	10:00 a.m.	Mid-semester reports to Registrar
November 24	Wednesday	3:00 p.m.	School closes for Thanksgiving Holiday
November 29	Monday	8:00 a.m.	Class work resumed
December 17	Friday	Noon	Christmas Holiday begins
January 3	Monday	8:00 a.m.	Class work resumed
January 27	Thursday	10:00 p.m.	First semester closes
January 28	Friday	Noon	Grades to Registrar

SECOND SEMESTER

February 1	Tuesday	8:00 a.m.	Registration
February 2	Wednesday	8:00 a.m.	Registration
February 3	Thursday		Classes begin
February 10	Thursday		Last day to enter a class for credit with a reduced load
March 7	Monday		Last day on which a course may be dropped without a grade
March 28	Monday	8:00 a.m.	Spring term registration
March 28	Monday	9:00 a.m.	Mid-semester reports to Registrar
K.EA.	Thurs., Fri., Sat.		Spring vacation
May 29	Sunday		Baccalaureate
June 1	Wednesday		Commencement
June 2	Thursday	10:00 p.m.	Second semester closes

SUMMER SCHOOL—1955

June 8	Wednesday	8:00 a.m.	Summer School begins
June 9	Thursday		Last day to register for a full load
June 11	Saturday		Last day to enter a course for credit with reduced load
July 16	Saturday		Short term ends
August 3	Wednesday	5:00 p.m.	Long terms ends

CALENDAR—1954

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Diploma, Eastern Kentucky State Normal School; A. B., University of Kentucky; A. M., Cornell University; additional graduate work, Harvard University.

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A. B., M. A., Eastern Kentucky State College; additional graduate work, University of Kentucky.

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A. B., State Teachers College, Farmville, Virginia; M. A., Teachers College, Columbia University; graduate student, University of Chicago.

MRS. MARY EDMUNDS BARNHILL, A. B., M. A., LL. B.
Associate Professor of English

Diploma, Western Kentucky State Normal School; A. B., University of Kentucky; M. A., Ohio State University; LL. B., University of Louisville; additional graduate work, Ohio State University.

CLIFTON A. BASYE, A. B., M. S. — **Instructor of Physics**

A. B., Morehead State College; M. S., University of Kentucky.

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B. S., M. S., University of Wisconsin.

***G. O. BRYANT, A. B., A. M.** — **Assistant Professor of Mathematics; Supervising Teacher, Model High School**

Diploma, Western Kentucky State Normal School; A. B., A. M., University of Kentucky.

---

*Retired June 30, 1942.
**On leave.

PEARL L. BUCHANAN, A. B., M. A. **Associate Professor of English**

A. B., Southwestern University; graduate student, University of Oklahoma and Northwestern University; M. A., George Peabody College for Teachers.

VIRGIL BURNS, A. B., M. A. **Associate Professor of History and Government**

Diploma, Western Kentucky State Normal School; student, Bowling Green Business University; A. B., University of Kentucky; M. A., Teachers College, Columbia University; additional graduate work, Columbia University.

MARY KING BURRIER, B. S., M. S. **Associate Professor of Home Economics**

Diploma, Hamilton College; B. S., M. S., University of Kentucky; graduate work, Columbia University, and University of Chicago.

JANE CAMPBELL, B. Mus., A. B., A. M. **Assistant Professor of Music**

B. Mus., Taylor University; A. B., Eastern Indiana State Normal School; graduate work, State Teachers College, Indiana, Pa.; A. M., Columbia University; Ecole Normale de Musique, Paris; student of Nadia Boulanger.

RONALD CARLEY, B.F.A., M.M. **Assistant Professor of Music**

B. F. A., Carnegie Institute of Technology; M. M., Indiana University.

ASHBY B. CARTER, B. S., M. A. **Associate Professor of Agriculture**

Student, University of Richmond, University of Virginia, and Virginia Mechanics Institute; B. S., M. A., George Peabody College for Teachers; graduate work, Columbia University and University of Kentucky.

D. J. CARTY, B. S., M. A. **Director of In-Service Education**

B. S., Eastern Kentucky State Teachers College; M. A., University of Cincinnati.

MRS. EMMA YOUNG CASE, A. B., M. A. **Associate Professor of Education; Dean of Women**

Student, University of Kentucky; A. B., Eastern Kentucky State Teachers College; M. A., George Peabody College for Teachers.

RICHARD G. CHRISMAN, B. A., M. A. **Assistant Professor of Commerce**

B. A., Berea College; graduate student, New York University, University of Chicago, University of Kentucky Law School; M. A., University of Kentucky; additional graduate work, University of Pittsburgh, University of Denver.

ROY B. CLARK, A. B., A. M., Ph. D. — **Professor of English**

Diploma, Nebraska State Normal School; A. B., University of Nebraska; A. M., Ph. D., Columbia University.

J. DORLAND COATES, B. S., M. A., Ph. D. — **Professor of Secondary Education; Principal of the Model High School**

B. S., Eastern Kentucky State Teachers College; M. A., George Peabody College for Teachers; Ph. D., Colorado State College of Education; post-doctoral work, University of Chicago.

MEREDITH J. COX, B. S., M. A. — **Professor of Chemistry**

Diploma, Warren Academy; B. S., M. A., George Peabody College for Teachers; additional graduate work, Columbia University, University of Wisconsin, and Duke University.

NOEL B. CUFF, B. S., A. M., Ph. D. — **Professor of Psychology; Director of Personnel**

B. S., A. M., Ph. D., George Peabody College for Teachers; post-doctoral work, University of Chicago.

FRED DARLING, B. S., M. A. — **Assistant Professor of Health and Physical Education; Assistant Football Coach**

B. S., M. A., Eastern Kentucky State Teachers College; additional graduate work, University of Kentucky.

JAMES HOMER DAVIS, B. S., M. Ed. — **Assistant Professor of Industrial Arts**

B. S., Eastern Kentucky State College; M. Ed., University of Missouri; additional graduate work, University of Kentucky.

***J. T. DORRIS, A. B., A. M., Ph. D.** — **Professor of History and Government**

A. B., Illinois College; A. M., University of Wisconsin; Ph. D., University of Illinois.

RICHARD A. EDWARDS, A. B., A. M. — **Professor of Education; Principal of Elementary Training Schools**

A. B., University of Kentucky; A. M., Columbia University.

FRED A ENGLE, A. B., A. M., Ph. D. — **Professor of Education**

Student, Cumberland College, University of Chicago; A. B., A. M., Ph. D., University of Kentucky.

D. THOMAS FERRELL, A. B., M. A., Ph. D. — **Professor of Education**

A. B., A. M., Duke University; M. A., Teachers College, Columbia University; one quarter, Trinity College, Dublin, Ireland; Ph. D., George Peabody College for Teachers; post-doctoral work, University of Chicago.

*Retired June 30, 1953.

MARY FLOYD, A B., M. A., B. S. in Library Service — **Associate Professor of History; Librarian**

A. B., Eastern Kentucky State Teachers College; M. A., Teachers College, Columbia University; graduate student, University of Chicago; B. S. in Library Service, Columbia University.

EDITH G. FORD, B. C. S., A. B., A. M. — **Assistant Professor of Commerce**

Diploma, Louisiana State Normal College; B. C. S., Bowling Green Business University; A. B., George Washington University; A. M., University of Kentucky; student, University of Paris.

DWIGHT DEAN GATWOOD, B. S., M. A. — **Assistant Professor of Art**

B. S., M. A., George Peabody College for Teachers; additional graduate work, Ohio State University.

***MAUDE GIBSON** — **Professor of Art**

Graduate, Lebanon Normal; two years' course in public school art, Teachers College, Miami University; student, New York School of Applied Design; Teachers College, Columbia University.

FREDERIC P. GILES, B. Mus., B. A., M. A., Ph. D. — **Professor of Art**

B. Mus., Southern Methodist University; B. A., North Texas State Teachers College; M. A., Ph. D., George Peabody College for Teachers; additional graduate work, American Conservatory of Music.

ANNA D. GILL, B. C. S., A. B., M. A. — **Assistant Professor of Commerce**

B. C. S., Bowling Green Business University; student, Chicago Gregg School, University of Wisconsin, and Western Kentucky State Teachers College; A. B., M. A., University of Kentucky; additional graduate work, Columbia University and Colorado State College of Education.

PRESLEY M. GRISE, A. B., M. A., Ph. D. — **Professor of English**

A. B., Western Kentucky State Teachers College; M. A., George Peabody College for Teachers; Ph. D., University of Kentucky.

G. M. GUMBERT, B. S., M. S. — **Assistant Professor of Agriculture; Visual Education**

B. S., M. S., University of Kentucky.

***MAY C. HANSEN, B. S., M. A.** — **Associate Professor of Education**

Diploma, Oshkosh State Teachers College; student, University of Chicago and Columbia University; B. S., George Peabody College for Teachers; M. A., Teachers College, Columbia University.

THOMAS C. HERNDON, B. S., M. A., Ph. D. — **Professor of Chemistry**

B. S., University of Kentucky; graduate work, University of Chicago; M. A., Ph. D., George Peabody College for Teachers.

---

*Retired June 30, 1942.
*Retired June 30, 1952.

WALTER E. HICKS, B. A., M. A. — **Instructor of History and Government**

B. A., Alderson-Broaddus College; M. A., University of Louisville; additional graduate work, Columbia University, University of Kentucky.

GERTRUDE M. HOOD, A. B., A. M. — **Assistant Professor of Health and Physical Education**

A. B., Ohio Wesleyan University; A. M., Columbia University.

WILLIAM B. HOPP, B. S., M. S., Ph. D. — **Assistant Professor of Biology**

B. S., Indiana State Teachers College; M. S., Ph. D., Purdue University.

SAUL HOUNCHELL, A. B., M. A., Ph. D. — **Associate Professor of English**

A. B., Denison University; M. A., Ph. D., George Peabody College for Teachers.

CHARLES T. HUGHES, A. B., M. A. — **Associate Professor of Physical Education and Director of Athletics**

Diploma, Morton-Elliott Junior College; A. B., University of Kentucky; M. A., University of Michigan.

RICHARD E. JAGGERS, A. B., A. M., Ph. D. — **Professor of Education**

A. B., A. M., University of Kentucky; Ph. D., Cornell University.

MRS. MABEL WALKER JENNINGS, B. S., M. A. — **Assistant Professor of Elementary Education**

B. S., M. A., Eastern Kentucky State College.

EDWIN P. KEEN, B. S., M. S. — **Instructor of Science; Supervising Teacher, Model High School**

B. S., Eastern Kentucky State College; M. S., University of Kentucky.

WILLIAM L. KEENE, B. S., M. A. — **Associate Professor of English**

Diploma, Middle Tennessee State Normal School; B. S., M. A., George Peabody College for Teachers; additional graduate work, George Peabody College for Teachers.

***CHARLES A. KEITH, B. A., M. A., Ped. D.** — **Professor of History and Government; Dean of Men**

Student, University of Arkansas and University of Texas; B. A., M. A., Oxford University; Honorary Doctor of Pedagogy, Ohio Northern University; additional graduate work, Indiana University.

L. G. KENNAMER, A.B., B.S., M.A., Ph.D. — **Professor of Geography and Geology**

A. B., Simmons University; student, University of Wisconsin, Vanderbilt University, and University of Tennessee; B. S., M. A., Ph. D., George Peabody College for Teachers.

---

*Retired June 30, 1953.

H. H. LaFUZE, A. B., M. S., Ph. D. — **Professor of Biology**

A. B., DePauw University; M. S., Ph. D., State University of Iowa; additional graduate work, Northwestern University.

CORA LEE, B. S., M. A. — **Assistant Professor of English; Supervising Teacher, Model High School**

B. S., George Peabody College for Teachers; M. A., Teachers College, Columbia University; additional graduate work, University of Chicago.

CLYDE LEWIS, A. B., M. A. — **Assistant Professor of History**

A. B., Eastern Kentucky State Teachers College; M. A., University of Cincinnati; additional graduate work, University of Kentucky.

PAUL McBRAYER, B. S. — **Basketball Coach**

B. S., University of Kentucky.

ALVIN McGLASSON, B. S., M. S. — **Instructor of Mathematics**

B. S., Eastern Kentucky State College; M. S., University of Kentucky.

ALEX GENTRY McILVAINE, B. S., M. A. — **Instructor of Commerce**

B. S., M. A., Eastern Kentucky State College; additional graduate work, University of Kentucky.

MARY FRANCES McKINNEY, B. S., M. A. — **Associate Professor of Geography**

Diploma, Eastern Kentucky State Teachers College; B. S., M. A., George Peabody College for Teachers.

GLENN A. McLAIN, A. B., M. A. — **Assistant Professor of History**

A. B., Defiance College; M. A., Bradley University; additional graduate work, Boston University.

FRANCES MARIE McPHERSON, B. M., M. M. — **Assistant Professor of Music**

B. M., Lindenwood College; student, Horner Conservatoire; M. M. Michigan State College; student, Rudolph Ganz.

MELVIN E. MATTOX, B. S., M. A. — **Professor of Education; Registrar**

Diploma, Mississippi State Normal School; B. S., M. A., George Peabody College for Teachers; additional graduate work, George Peabody College for Teachers and University of Kentucky.

MARGARET HUME MOBERLY, B. S., M. B. A. — **Assistant Profesor of Commerce**

B. S., Eastern Kentucky State Teachers College; M. B. A., University of Chicago.

WILLIAM J. MOORE, A. B., A. M., Ph. D. — **Dean of the Faculty Director of Research; Professor of Economics**

Diploma, Eastern Kentucky State Normal School; student, College of Law, University of Kentucky; A. B., A. M., Ph. D., University of Kentucky; post-doctoral work, University of Kentucky and University of Chicago.

WILLIE MOSS, B. S., M. A. — **Assistant Professor of Home Economics**

B. S., Western Kentucky State College; M. A., University of Kentucky.

MRS. JANET MURBACH, A. B., A. M., Docteur de l'universite de Toulouse, France. — **Professor of Romance Languages**

A. B., Oberlin College; student, University of Paris and University of California; A. M., University of Kentucky; Docteur de l'universite de Toulouse, France.

THOMAS E. MYERS, B. S. — **Instructor of Industrial Arts**

B. S., North Texas State College; graduate work, North Texas State College.

SMITH PARK, B. S., M. S., Ph. D. — **Professor of Mathematics**

B. S., M. S., Ph. D., University of Kentucky.

EDWARD N. PETERSON, B. A., M. A., Ph. D. — **Assistant Professor of History**

B. A., M. A., Ph. D., University of Wisconsin.

GLENN E. PRESNELL, B. S. — **Assistant Football Coach**

B. S., University of Nebraska.

ELLEN PUGH, A. B., A. M. — **Assistant Professor of Elementary Education; Supervising Teacher Elementary Training School**

A. B., Ohio Wesleyan University; A. M., Ohio State University; additional graduate work, Ohio State University and Columbia University.

HORACE W. RAPER, A. B., M. A., Ph. D. — **Assistant Professor of History**

A. B., M. A., University of North Carolina; Ph. D., University of North Carolina.

ALMA REGENSTEIN, B. S., M. A. — **Assistant Professor of Home Economics; Supervising Teacher, Model High School**

B. S., Eastern Kentucky State Teachers College; M. A., University of Kentucky.

R. R. RICHARDS, A. B., M. B. A. — **Assistant Professor of Commerce**

A. B., Eastern Kentucky State Teachers College; graduate student, University of Kentucky; M. B. A., College of Business Administration, Boston University; additional graduate work, Boston University; student, College of Law, Boston University, and University of Southern California.

HAROLD RIGBY, B. S. — **Instructor of Music; Director of High School Band and Orchestra**

B. S., Eastern Kentucky State Teachers College; graduate work, University of Kentucky.

JOHN D. ROWLETT, B. S., M. S. — **Instructor of Industrial Arts**

B. S., M. S., North Texas State College; additional graduate work, Southern Methodist University, North Texas State College.

RUBY RUSH, A. B., A. M. — **Assistant Professor of Latin; Supervising Teacher, Model High School**

Graduate, Virginia Intermont College; A. B., University of Kentucky; A. M., Columbia University.

TOM C. SAMUELS, Ph. C., B. S., M. S. — **Assistant Professor of Health and Physical Education; Head Football Coach**

Ph. C., B. S., University of Michigan; M. S., University of Kentucky.

***ANNA A. SCHNIEB, A. B., A. M., Ph. D.** — **Professor of Education**

Diploma, Indiana State Teachers College; student, Indiana University; A. B., A. M., Columbia University; additional graduate work, Columbia University and University of Chicago; Ph. D., University of Vienna; additional work, University of Chicago.

MRS. MAMIE WEST SCOTT, B. M., M. A. — **Instructor of Elementary Education, Rural Demonstration School**

B. M., Martha Washington College; M. A., University of Kentucky; additional graduate work, College of Music, Cincinnati; University of Tennessee, Columbia University.

MRS. BLANCHE SAMS SEEVERS, B. Mus., A. B., M. Mus. — **Assistant Professor of Music**

B. Mus., A. B., University of Kansas; M. Mus., Northwestern University; additional graduate work, Columbia University.

EVELYN SLATER, B. S., M. S. — **Assistant Professor of Home Economics**

B. S., M. S., University of Kentucky; additional graduate work, Columbia University.

WILLIAM STOCKER, B. S., M. S. — **Assistant Professor of Agriculture**

B. S., Eastern Kentucky State Teachers College; M. S., University of Kentucky.

****THOMAS STONE, Mus. B., M. M.** — **Associate Professor of Music**

Mus. B., Oberlin College; additional work, La Follette School of Music, New York; M .M., Cincinnati College of Music.

VIRGINIA F. STORY, B. S., M. A. — **Assistant Professor of Elementary Education; Supervising Teacher, Elementary Training School**

Diploma, Eastern Kentucky State Teachers College; B. S., M. A., George Peabody College for Teachers.

MRS. MARY KLUG TARWATER, B. S., M. S. — **Instructor of Art**

B. S., M. S., Indiana State Teachers College.

WILLIAM H. TARWATER, JR., B. S., M. M. — **Instructor of Music**

Student, Yale University; B. S., M. M., George Peabody College for Teachers.

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*Retired June 30, 1952.

**On leave.

IDA PEARL TEATER, A. B., M. A. — **Assistant Professor of English; Supervising Teacher, Model High School**

A. B., M. A., Eastern Kentucky State College; additional graduate work, George Peabody College for Teachers.

BROWN E. TELFORD, B. S. — **Assistant Professor of Music; Teacher of Piano and Organ**

Diploma, Greenbrier College for Women; student, Cincinnati Conservatory of Music, New York School of Music and Arts, New England Conservatory of Music; B. S., Columbia University.

MRS. JULIAN TYNG, B. S., M. A. — **Associate Professor of Education**

Diploma, Eastern Kentucky State Normal School and Teachers College; B. S., George Peabody College for Teachers; graduate work, George Peabody College for Teachers; M. A., Teachers College, Columbia University.

JAMES E. VAN PEURSEM, A. B., B. Mus., M. A. — **Professor of Music**

A. B., Morningside College; B. Mus., Oberlin College; M. A., New York University.

MRS. VASILE M. VENETTOZZI, B. M., M. M. — **Assistant Professor of Music**

B. M., Baldwin-Wallace College; M. M., Eastman School of Music; additional graduate work, Eastman School of Music.

VICTOR A. VENETTOZZI, A. B., M. A. — **Instructor of English**

A. B., M. A., Eastern Kentucky State College.

SAMUEL WALKER, A. B., A. M., Ph. D. — **Assistant Professor of Mathematics**

A. B., Maryville College; A. M., Ph. D., University of Kentucky.

WILLIAM D. WARD, B. S., M. A., Ph. D. — **Assistant Professor of Education**

B. S., M. A., Western Illinois State Teachers College; Ph. D., Bradley University.

RALPH W. WHALIN, B. S., M. Ed. — **Professor of Industrial Arts**

B. S., Western Kentucky State Teachers College; M. Ed., University of Missouri; additional graduate work, University of Kentucky.

A. L. WHITT, B. S., M. S. — **Assistant Professor of Biology**

B. S., Western Kentucky State College; M. S., University of Kentucky; additional graduate work, Vanderbilt University.

ARTHUR L. WICKERSHAM, B. S., M. A. — **Assistant Professor of Mathematics; Supervising Teacher, Model High School**

B. S., M. A., Eastern Kentucky State Teachers College; additional graduate work, University of Kentucky.

MARTHA J. WILLIAMS, B. S. — **Instructor of Physical Education**

B. S., Eastern Kentucky State College; graduate work, Eastern Kentucky State College and University of Kentucky.

*ELIZABETH WILSON, B. S., M. A. — Assistant Professor of Elementary Education; Supervising Teacher, Elementary Training School

Diploma, Martin College; B. S., M. A., George Peabody College for Teachers.

M. GLEN WILSON, JR., B. S., M. A. — Instructor of English and Speech

B. S., West Virginia Wesleyan College; M. A., West Virginia University; additional graduate work, Ohio State University.

GERMANIA J. WINGO, B. S., M. A. — Assistant Professor of Elementary Education; Supervising Teacher, Elementary Training School

Diploma, Virginia State Teachers College; diploma in critic work, Columbia University; B. S., M. A., Teachers College, Columbia University; additional graduate work, University of Colorado.

LIBRARY STAFF

MARY FLOYD, A. B., M. A., B. S. in Library Service — Associate Professor of History; Librarian

A. B., Eastern Kentucky State Teachers College; M. A., Teachers College, Columbia University; graduate student, University of Chicago; B. S. in Library Service, Columbia University.

MRS. MARY DICKERSON, A. B., B. S. in Library Science — Assistant Librarian

A. B., Centre College; B. S. in Library Science, University of Kentucky.

MRS. LESTER MILLER, B. S., M. A. — Assistant Librarian

B. S., M. A., George Peabody College for Teachers.

CLEO STAMPER, B. S., M. A. — Assistant Librarian

B. S., Union College; M. A., George Peabody College for Teachers.

MRS. GUY WHITEHEAD, B. S., B. S. in Library Science — Assistant Librarian in Charge of Reference Work

B. S., B. S. in Library Science, George Peabody College for Teachers.

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*Retired August 31, 1953.

MILITARY SCIENCE STAFF

COLONEL HAYDON Y. GRUBBS, B. S. — **Professor of Military Science and Tactics**

B. S., United States Military Academy; graduate of the Field Artillery School, Ft. Sill, Oklahoma, Command and General Staff College, Ft. Leavenworth, Kansas, and the Armed Forces Staff College, Norfolk, Virginia.

LT. COLONEL ALDEN O. HATCH, B. S. — **Assistant Professor of Military Science and Tactics**

B. S., University of Utah; graduate of the Basic and Advanced Course Field Artillery School, Ft. Sill, Oklahoma; Command and General Staff College, Ft. Leavenworth, Kansas.

MAJOR ROBERT J. McDONOUGH, A. B. — **Assistant Professor of Military Science and Tactics**

A. B., University of Notre Dame; graduate of the Advanced Officers Course, Ft. Sill, Oklahoma.

MASTER SERGEANT ROBERT A. SIMMONS — **Chief Clerk and Instructor**

MASTER SERGEANT FLOYD B. BEACH — **Operations Sergeant and Instructor**

SERGEANT FIRST CLASS BAYLIS E. PATTERSON — **Supply Sergeant and Instructor**

SERGEANT FIRST CLASS PAUL A. HUBER — **Fire Direction Specialist and Instructor**

CORPORAL PHILLIP M. HALPIN — **Acting Motor Sergeant and Instructor**

ADMINISTRATIVE STAFF

MRS. L. A. ABRAMS, Housing Secretary for Men's Dormitories
MRS. LUCIAN ADAMS, B. S., Secretary to the Dean
MRS. KATHRYN M. ALLEN, Secretary, Department of Health and Physical Education
MRS. MABELLE ALLEN, Assistant to the Bookkeeper
MRS. LUCILLE ARNOLD, Clerk, College Post Office
W. A. AULT,, Superintendent of Buildings and Grounds
KATHLEEN BALES, Assistant Supervisor, Burnam Hall
FRED BALLOU, Book Store Manager
MRS. JAMES BINGHAM, Accounts Clerk, Business Office
LOUISE BROADDUS, A. B., Recorder, Registrar's Office
MRS. KATHERINE CHENAULT, A. B., Hostess, Student Union Building
LOIS COLLEY, Secretary to the President and Secretary to the Board of Regents
MRS. N. G. DENISTON, Secretary, Alumni Office
MRS. RACHEL DUNCAN, Clerk-Typist, Office of In-Service Education
MRS. J. P. DURHAM, SR., Assistant to Supervisor of Cafeteria
MRS. BESSIE H. GRIGGS, Information Clerk
MRS. JOHN HAGAN, Social Director, Burnam Hall
MRS. WILLIAM B. HAMMOND, Secretary, ROTC
MRS. J. W. HILL, Assistant Supervisor of Cafeteria
KATHLEEN JUSTICE, B. S., Stenographer, Personnel Office
MARY FRANCES KOVALEVICH, R. N., College Nurse
MRS. JANE ROSE LAND, B. S., Stenographer, Registrar's Office
MRS. HOMER LEDFORD, B. S., Stenographer, Business Office
E. P. McCONNELL, Bookkeeper
EDITH L. McILVAINE, Supervisor of the Cafeteria
MARY F. McKINNEY, B. S., M. A., Alumni Secretary
MRS. E. L. MUSICK, Housemother, Stateland Hall
E. B. NOLAND, Cashier
MRS. HELEN PERRY, Assistant to the Director of Personnel
CARRIE POTTS, Secretary to the Registrar
MRS. ANTONIA RICHARDSON, Clerk-Typist, Bookkeeper's Office
MRS. ANGIE ROBERTS, Stenographer, Office of In-Service Education
MRS. J. T. TURNER, Clerk, Book Store
MRS. BEN C. TURPIN, Clerk-Typist, Dean's Office
MRS. WILLIAM VAN PELT, Stenographer, Dean's Office
MRS. A. L. WHITT, B. S., Housemother, Sullivan Hall
MRS. AILEEN WICKERSHAM, Secretary to the Business Agent
EUNICE WINGO, Assistant to the Dean of Women
MRS. W. C. YOUNCE, Secretary, Department of Music

FACULTY ORGANIZATION

CHAIRMEN OF DIVISIONS OF INSTRUCTION

Applied Arts and Sciences ..... W. J. Moore
Agriculture — Chairman
Commerce
Home Economics
Industrial Arts
Library Science

Fine Arts ..... Frederic P. Giles
Art — Chairman
Music

Biological and Physical Sciences ..... Thomas C. Herndon
Biology — Chairman
Chemistry
General Science
Geology
Physics

Education ..... D. Thomas Ferrell
Elementary Education — Chairman
Educational Psychology
Public School Administration
Secondary Education
Training Schools

Health and Physical Education ..... Charles T. Hughes
Health — Chairman
Physical Education

Languages ..... Roy B. Clark
English — Chairman
French
German
Latin
Spanish

Mathematics ..... Smith Park
Chairman

Military Science ..... Colonel Haydon Y. Grubbs

Social Sciences ..... Kerney M. Adams
Geography — Chairman
Government
History
Sociology

COMMITTEES

ALUMNI

McKinney, Adams, Mrs. Adams, Blanton, Brittain, Broaddus, Carty, Case, Chenault, Coates, Darling, Davis, Floyd, Jennings, Keen, Lewis, McIlvaine, Moberly, Moore, Regenstein, Richards, Rigby, Stocker, Story, Teater, Tyng, Venettozzi, Wickersham, Williams

ATHLETICS

Park, Black, Coates, Darling, Hughes, Keene, LaFuze, McBrayer, Whalin, and two students

CREDITS AND CREDENTIALS

Mattox, Clark, Cuff, Herndon, Hounchell

FINE ARTS AND ENTERTAINMENT

Giles, Buchanan, Campbell, McPherson, Seevers, Stone, Telford, Tyng, Van Peursem, Mrs. Venettozzi and four students

GRADUATE COUNCIL

Moore, Clark, Cuff, Engle, Ferrell, Jaggers, LaFuze, Mattox

GRADUATION

Kennamer, Black, Case, Grise, Mattox

IN-SERVICE EDUCATION

Carty, Coates, Edwards, Engle, Ferrell, Jaggers, Kennamer, Mattox, Moore, Seevers, Whalin, and four students

LIBRARY

Floyd, Ferrell, Giles, Herndon, Hood, Keene, LaFuze, Lee, Lewis, McKinney, Moore, Park, Stocker, Van Peursem, two juniors and two seniors

PERMANENT PLANNING AND CURRICULUM

Moore Adams, Clark, Ferrell, Giles, Grubbs, Herndon, Hughes, Park, two juniors and two seniors

SOCIAL

Case, Mrs. Adams, Buchanan, Gill, Hopp, Moss, Raper, Rowlett, Stone, Ward, and eight students

STUDENT LOANS, SCHOLARSHIPS, AND FELLOWSHIPS

Cuff, Adams, Brock, Case, LaFuze, Richards

STUDENT UNION BOARD

Chenault, Ballou, Case, McIlvaine, Stone, and five students

STUDENT WELFARE

Park, Burrier, Case, Coates, LaFuze, Richards, Story, Whalin

VISUAL EDUCATION

LaFuze, Floyd, Gatwood, Gumbert, Stocker, Tyng, Wingo

The President and Dean are ex officio members of all standing committees.

GENERAL INFORMATION

GENERAL INFORMATION

ORGANIZATION

The Eastern Kentucky State College is organized on the semester plan. The school year is divided into two semesters of eighteen weeks each and into a summer session. A student who attends both semesters and the summer session can complete a full four-year college course in three calendar years.

The College curricula are organized on various levels and lead to the Bachelor of Arts or the Bachelor of Science degree, and to the Master of Arts degree. Freshman and sophomore courses are offered in the Lower Division. Junior and senior courses are given in the Upper Division. Observation and Student Teaching are provided in the Elementary and Secondary Training Schools. The Graduate Division offers work for those who want to major in Education and minor in other departments.

LOCATION

Eastern Kentucky State College is conveniently located in Richmond, Madison County, Kentucky. Richmond is on the main line of the L. & N. Railway, 112 miles south of Cincinnati, Ohio. The College can be reached easily by automobile. It is on the Dixie Highway (U. S. No. 25), 26 miles southeast of Lexington; on U. S. Highway No. 227; and on Kentucky Highway No. 52.

Richmond is a city of about 10,268 people. It is located in the famous Bluegrass Region of Kentucky and presents many advantages as a college community.

Eastern is surrounded by places of historic and scenic interest. These places of interest include: Boonesboro (12 miles), Memorial Bridge—one of the Nation's finest (13 miles), Harrodsburg and Shakertown (45 miles), Herrington Lake (35 miles), Cumberland Falls, (100 miles), State Capitol at Frankfort (55 miles), Berea College (14 miles), Kentucky Natural Bridge State Park (63 miles), My Old Kentucky Home (85 miles), Louivsille (100 miles), Lincoln Memorial (110 miles), the foothills of the Cumberland Mountains (20 miles), and the famous stock farms in the heart of the Bluegrass Region (26 miles).

HISTORY

The year Massachusetts established normal schools for the preparation of teachers, Kentucky established a public school system. The first Superintendent of Public Instruction of Kentucky in his initial report requested the General Assembly to pass legislation for "the founding of one or more normal schools for the purpose of training the sons of the soil for teaching." Fifteen different state superintendents appeared before more than

thirty sessions of the Legislature making the same plea for a school for teachers. Sixty-eight years passed before the General Assembly of 1906 heeded this request. The late J. C. W. Beckham, Governor of the State at that time, signed the bill establishing the Eastern Kentucky State Normal School on March 21, 1906, and shortly after a commission selected the campus of old Central University at Richmond as the site of the new school.

The curriculum has been improved from the short review and certificate courses of the first years. Eastern now offers four-year curricula leading to the Bachelor of Arts or the Bachelor of Science degree in teacher education and in general or professional areas. A one-year graduate curriculum leads to the Master of Arts degree in Education. Requirements for college entrance have been raised from eighth grade graduation or possession of any kind of certificate to graduation from an accredited high school.

The College has been directed by five presidents: Ruric Nevel Roark, 1906-1909; John Grant Crabbe, 1910-1916; Thomas Jackson Coates, 1916-1928; Herman Lee Donovan, 1928-1941; William Francis O'Donnell, 1941—.

PURPOSE

Eastern has for its general purpose the development of vigorous health, thorough scholarship, strong professional spirit, broad culture, and balanced personality in its students. Courses of study and extra-curricular activities are devoted to the concept that character and services are the highest aims of education.

The specific aims of the College are:

A. The primary aim of the Eastern Kentucky State College is to prepare teachers for the schools of Kentucky. The College was established to prepare teachers and it has held to that purpose with such expansions and modifications as are needed to maintain progressive educational policies and practices.

B. Another aim is to provide instruction in general and specialized fields so that students may be prepared for professional, technical, and industrial careers. The College has many students who are pursuing successfully courses of a pre-professional or vocational nature. Such students secure excellent liberal arts work in various departments leading to a baccalaureate degree in the sciences or in the arts.

C. A third aim of Eastern is to make a real contribution to the life of the community and the area which it serves. The institution attempts to meet this obligation by:

1. Preparing only worthy teachers.
2. Conducting extension courses (either on the campus or off), and study centers when requested.
3. Furnishing expert advice or other assistance at teachers' conferences.
4. Supplying speakers for high school commencements and other community activities.
5. Keeping a personal interest in the graduates and encouraging professional and intellectual growth.
6. Keeping in close touch with the needs of the teachers in the field and by being ready to give assistance to the teachers.
7. Holding on the College campus conferences for the further development of leaders.
8. Supplying to the teachers of the community which the College serves library materials and other materials such as visual aids.

BUILDINGS AND FACILITIES

THE CAMPUS

The beauty of Eastern's campus lies in the gently rolling Bluegrass slopes and in the stately forest trees and shrubs. The campus is further enhanced by a replica of an ancient Greek Amphitheater which has a seating capacity of 2,500.

The College plant, valued at approximately $4,500,000.00 includes nineteen beautiful and well-equipped buildings located on more than 225 acres of Bluegrass land.

COATES ADMINISTRATION BUILDING

The Thomas Jackson Coates Administration Building was named in honor of Eastern's third president. The offices of the President, Dean, Registrar, Personnel Director, Business Agent, Director of In-Service Education, and of some instructors are located in this building. There are also classrooms in the Administration Building.

HIRAM BROCK AUDITORIUM

The Hiram Brock Auditorium was named in honor of Senator Hiram Brock who served as a member of the Board of Regents. It adjoins the Administration Building and has a seating capacity of 2,000. The Auditorium has a stage 40 feet by 30 feet, equipped with adequate curtains and drops, a modern movie projection room, and a Hammond electric organ. It also contains studios and dressing rooms.

PRESIDENT'S HOME

The two-story brick residence, which is the President's Home, was construtced in 1889 as a residence for the Chancellor of Central University but did not become the property of the College until 1912.

ROARK BUILDING

Roark Building has recently been completely repaired and redecorated. It provides excellent facilities for the departments of mathematics, English, romance languages, geography and geology. It was named in honor of Dr. Ruric Nevel Roark. Eastern's first president.

ADDITION TO ROARK

A new Science building which is an extension of Roark has recently been completed under the direction of the State Property and Building Commission. It is a four story structure of brick, concrete and steel. Its spacious, well equipped laboratories and lecture rooms are among the best in the nation. The building houses the departments of biology, chemistry, and physics. It also provides space for the college museum and extra class rooms.

CAMMACK BUILDING

The James W. Cammack Building was named for a man who was appointed to the first Board of Regents for the College in 1906 and who remained on the Board as an efficient and faithful member until his death in 1939. The building is designed and used entirely for the elementary grades of the College Training School.

RURAL DEMONSTRATION SCHOOL

The Rural Demonstration School, located on the College Farm near the campus, is a model brick building. It serves as a laboratory in which students who plan to teach in the one-room rural schools of the State may get practical experience.

UNIVERSITY BUILDING

The University Building, a handsome, four-story brick structure, was constructed in 1874 and, as a result of excellent maintenance, still serves as well as when it was built more than seventy years ago. It stands as a landmark on the campus and houses the high school division of the Eastern Kentucky State College Training School.

CRABBE LIBRARY

The John Grant Crabbe Library houses over 90,000 volumes and several hundred periodicals. The John Wilson Townsend Collection of Kentuckiana, located in the Eastern Library, consists of more than 4,000 volumes. It is one of the most extensive of its kind in existence. The Library was named in honor of Eastern's second president, John Grant Crabbe, who served the institution from 1909 to 1916.

WEAVER HEALTH BUILDING

The Weaver Health Building is named for the late Charles F. Weaver of Ashland, Kentucky, who served on the Board of Regents at Eastern from 1920 to 1932. It is one of the largest and best equipped buildings on the campus. In it there are two gymnasiums, one 110 feet by 90 feet and one 74 feet by 40 feet; a large variety of physical education apparatus; an official-size tile swimming pool equipped with machinery for heating, filtering, and purifying all water that enters the pool; more than 1,200 steel

lockers for the use of the students; offices of members of the health and physical education staff; several classrooms; ROTC headquarters; and the bacteriology laboratory.

FITZPATRICK ARTS BUILDING

The Fitzpatrick Arts Building houses three departments of the College; Industrial Arts, Home Economics, and Art. Modern machinery and the latest teaching equipment are available to students taking work in these departments. It is named for the Honorable H. D. Fitzpatrick, who was a member of the Board of Regents of the College.

HOME ECONOMICS PRACTICE HOUSE

The Practice House is the residence for those students in the Home Economics Department who take the laboratory course in Household Management. Here the girls live and work together for about twelve weeks, co-operatively preparing their own meals, doing their own marketing, entertaining their guests, and making a pleasant home life for themselves.

TELFORD MUSIC BUILDING

The Telford Music Building, located on the campus, was formerly the manse of the First Presbyterian Church. In it are the studios of the teachers of music, except the director, and several practice rooms. It is named for Dr. R. L. Telford, who was minister of the First Presbyterian Church for many years.

JOHNSON STUDENT UNION BUILDING

Eastern's newest and finest building is the Keen Johnson Student Union Building. This building contains club rooms for students, recreation halls, the Little Theater, student post office, bookstore, soda fountain and grill, dining halls, the faculty club rooms, and a spacious reception room. It was named in honor of a former Governor of Kentucky who also served on the Board of Regents. The Student Union Building was constructed by means of a Federal grant and a bond issue at no direct cost to the State.

HANGER STADIUM

The Hanger Stadium was built as a gift from students, faculty, and friends of the College, supplemented by a PWA grant. This concrete, steel, and tile structure has dormitory accommodations for thirty men students, offices for coaches, dressing and equipment rooms, and showers. The seating capacity is 5,000.

STATELAND FARM

New Stateland Farm, owned and operated by the College, consists of approximately 185 acres and the total College-owned acre-

age is approximately 225 acres. The Farm is used as a laboratory by the Department of Agriculture. Vegetables, fruits and dairy products from the Farm are used in the College Cafeteria. The Farm is the home of one of the finest purebred Holstein dairy herds in the country. New Stateland Hall is located on the Farm and is used as a residence by the manager and as a men's dormitory.

POWER PLANT

The Power Plant serves as a central heating unit for all the buildings on the campus.

BECKHAM HALL, McCREARY HALL, MILLER HALL, AND MEMORIAL HALL

The dormitories for men consist of four separate units: Beckham Hall, McCreary Hall, Miller Hall, and Memorial Hall. The first three units provide excellent dormitory accommodations for 48 men each. Memorial Hall provides accommodations for 60 men. The total capacity of the four units is 204 men. The rooms in Beckham, McCreary, and Miller Halls are arranged in suites of four with one adjoining bath. For each pair of such sections, one above the other, there is a private outside entrance. There are no halls except those necessary to connect each group of four rooms with the outside entrance and the bath. Prospective students are invited to inspect the dormitories by appointment with the Dean of Men.

Beckham Hall is named for the late J. C. W. Beckham, who was Governor of Kentucky when Eastern was founded. McCreary Hall is named for James B. McCreary, a Richmond citizen, who twice served the State as Chief Executive. Miller Hall is named for Robert W. Miller, a Madison countain, who introduced in the lower house of the General Assembly a bill establishing Eastern. Memorial Hall derived its name from a building constructed by Central University.

In spite of a shortage of dormitory space, more than 700 men were housed on the campus during the academic year 1953-54.

BURNAM HALL

Burnam Hall was named for Judge A. R. Burnam, who served in the Senate and helped Eastern secure her first significant appropriation. It provides beautiful, comfortable, and fireproof living quarters for 370 students. Most of the rooms are arranged in suites of two with a connecting bath. A few rooms have private baths. Prospective students are invited to inspect rooms in the domitories for women by appointment with the Dean of Women. These buildings are open practically every day in the year.

SULLIVAN HALL

Sullivan Hall is a dormitory for women and accommodates approximately 158 students. It was named for the first local regent,

Mr. Jere A. Sullivan, who helped establish the first two normal schools in Kentucky. Sullivan Hall is a comfortable and convenient home for the women who choose to live there. Central baths are located on each floor of the building.

INDIVIDUAL RESIDENCES

There are a few individual residence buildings which are a part of the campus. One is a two-story brick building that was a part of the Central University plant. It is the residence of the Superintendent of Buildings and Grounds.

VETERANS' HOMES

The College is making special efforts to meet the needs of Veterans for homes. A hundred pre-fabricated houses or apartments have been located on the campus at Eastern for occupancy by Veterans and their families. Dormitory facilities have been secured for one hundred additional single Veterans. Further information regarding Veterans' homes on the College Campus or in Richmond may be secured by writing the College.

BURNAM HALL
A Dormitory for Women

STUDENT SERVICES AND ACTIVITIES

Living Accommodations.—Students who do not live in dormitories are required to live in homes approved by the College. All students not living in their own homes, whether rooming in the dormitories, in private homes, or in rooming houses, are subject to the regulations and supervision of the College.

Dormitory Rooms for Women Students.—Women students are required to occupy dormitory rooms while rooms are available on the campus. After the dormitory accommodations for 528 students are filled, women students may take rooms in private homes in Richmond, but should not engage rooms without first consulting the Dean of Women.

Dormitory Rooms for Men Students.—Dormitory rooms will be reserved for men who meet admission requirements as long as facilities are available. The dormitories for men accommodate 234 students.

Rate of Room Rent for Women Students.—The rate of room rent varies according to the location, furnishings, equipment, and the number of students occupying a room.

BURNAM HALL—

Front rooms .....$45.00 per semester per student
All rooms—South Section ..... 36.00 per semester per student
All rooms—North Section ..... 31.50 per semester per student

SULLIVAN HALL—

All rooms .....$31.50 per semester per student

Rate of Room Rent for Men Students.—Room rent varies according to the facilities provided.

MEMORIAL HALL—

All rooms in this hall rent for $31.50 per semester per student.

BECKHAM HALL, McCREARY HALL, AND MILLER HALL—

All rooms in these halls rent for $40.50 per semester per student.

Linen Service Included in Room Rent.—The College furnishes sheets and pillow cases for all rooms and pays the expense of having them laundered.

Each student is expected to provide his own blankets, comforters, towels, soap, etc.

Dormitory Room Reservations.—Students desiring to have rooms reserved in the dormitories should write for application forms. When applying for dormitory reservations, students should mention the price of room preferred. Applications for room reservations are filled in the order in which they are received. Rooms can generally be assigned promptly upon receipt of applications; however, reservations are subject to cancellation unless a student has complied with Admission and Scholarship requirements.

Room reservations cannot be transferred and are void unless claimed by 4:30 p. m. on the opening day of the semester.

Room Deposit.—When an application is made for a room, the student must pay a deposit fee of $5.00. This fee is retained by the College as a guarantee of the proper care of room and furnishings. At the termination of the student's stay in the dormitory, the whole or such part of it as may be due after deduction for damage is made, will be refunded to the student.

Requests for cancellation of room reservation must be received not later than twenty days before the opening of the semester or term for which reservation was made; otherwise, room deposit is forfeited to the College and will not be refunded.

Off-Campus Rooms for Students.—Students interested in renting off-campus rooms may secure a list by writing to the College.

College Cafeteria.—The Cafeteria is operated by the College for the convenience of the students. Most of the students, including those who live off the campus as well as those who live on the campus, find it to their advantage to take their meals in the cafeteria.

Book Store.—The College Book Store is located on the ground floor of the Student Union Building. It is operated by the College and provides books and classroom supplies to students at reasonable prices. A grill is operated in connection with the Book Store.

College Post Office.—The College Post Office provides mail service for all students who live in the dormitories. An individual lock box is assigned to each person. The Post Office is located on the ground floor of the Student Union Building. Students receiving their mail through the College Post Office should have all mail addressed in the following manner: Mr. John Smith, Box 231, College Post Office, Eastern Kentucky State College, Richmond, Kentucky.

Students with off-campus rooms do not receive their mail through the College Post Office. Their mail should be sent to the address where they are living.

Student Health Service.—The student health service at Eastern is under the direction of the College Physician and a nurse.

SULLIVAN HALL

The service includes an annual physical examination for each student, medical advice and attention at all times, immunizations against contagious diseases, and limited hospitalization. Classes are conducted in first aid, safety, and personal and community hygiene. The health program at Eastern emphasizes preventive treatment. No charge is made for any of these services to the student.

Athletics.—Eastern has intercollegiate athletic teams in football, basketball, baseball, track, tennis, and swimming. These teams participate in a schedule of contests with other college teams each year. Eastern is a member of the Ohio Valley Conference and the Southern Intercollegiate Athletic Association. All official intercollegiate athletic events in which the College participates are governed by the rules and regulations of these two organizations.

Play and Recreation.—Eastern affords its students opportunities for play and recreation. Recreational activities are required of all freshmen and sophomores. These activities, offered during school hours, are varied and seasonal. The aims are to develop regular habits of play, physical strength, vigor and sportsmanship. Sports, such as playground baseball, volley ball, soccer, speedball, hockey, lacrosse, track, field archery, handball, lower organized games and their modifications, are offered.

Every student has an opportunity to participate in the leisure-time activities which are offered in seasonal tournaments.

The Swimming Pool.—The swimming pool in the Weaver Health Building serves both the college and the training schools. Only bona fide students and those officially connected with the institution are permitted to use the pool. A complete physical examination and a health certificate are required for admission. Students who expect to use the pool should see the college physician and arrange to take a physical examination. Regulation cotton bathing suits are required. Admission to the pool is strictly according to schedule.

Student Guidance and Personnel Services.—The personnel program at Eastern is planned to help students meet their individualized needs and to achieve success. Also to help students avoid experiences which are likely to be too costly, the best available tools, techniques, and resources are used.

The personnel services of the College are related to: (1) Admission of new students; (2) orientation of freshmen; (3) evaluation and counseling of students; (4) mental and physical health; (5) provision for well-rounded student activities; (6) supervision of adequate living facilities; (7) maintenance of useful personnel records; (8) provision for employment, placement, and follow-up requirements.

BECKHAM HALL
One of the Dormitories for Men

Many staff members handle various aspects of the personnel work. The Dean of the College, the Registrar, the Dean of Women, the Dean of Men, the Director of Personnel, and in fact, all members of the faculty counsel students. The College Physician handles health problems; the Dean of Women and the Dean of Men provide counsel relative to social life, living facilities, and related problems of students; and other consultants render specialized guidance as needed by students and as implied by a modern philosophy of education.

Personnel services are provided at Eastern for all new students; additional, optional services are available to help individuals with their planning; and clinical services are arranged to meet special needs. All personnel activities are designed to be practical. They are provided to help students attain a maximum personal, social, and academic development in a stimulating environment.

Opportunity for Student Employment.—A limited number of students may earn a part of their expenses by working for the College Cafeteria, Library, Book Store, Post Office, Dormitories, Administrative Offices, College Farm, etc. Some students may also secure part-time employment in Richmond stores, restaurants, and other business establishments.

Students are advised not to enter expecting employment of this kind unless they have arranged for it in advance. All applications for student employment should be addressed to: The Dean, Eastern Kentucky State College, Richmond, Kentucky. As a general rule students should enter Eastern prepared to pay all their expenses for at least one semester.

Vocational Rehabilitation.—Students with physical handicaps of various kinds may be approved for Vocational Rehabilitation and receive all registration and tuition fees and school supplies for nine months of a year. Persons who wish to consult with a representative relative to Vocational Rehabilitation should write to the Department of Education, Division of Special Education, Frankfort, Kentucky, for specific instructions.

Loans.—The student loan fund of the Eastern Kentucky State College is designed to help worthy students complete their education. It has been augmented from time to time by gifts from different individuals and organizations and is being increased annually. Small loans are available to upper-class students. Those having high scholarship records will be given preference in the granting of loans. This fund makes it possible for a student to borrow a small amount of money on a personal note at legal rate of interest. Students who desire further information concerning this fund should get in touch with the Chairman of the Student Aid Committee.

The Charles F. Weaver Fund.—This is a fund of $1,000.00 established by the late Charles F. Weaver, long-time member of the Board of Regents, to encourage proficiency in oratory and home economics. The income from the fund is used to provide prizes to be awarded annually to the student who excels in oratory and to the student who has made the greatest advance in the field of home economics. The recipients are selected by a faculty committee.

William Davis Scholarships.—Under the provisions of the will of the late William Davis of Newport, Kentucky, a sum of money was left for the benefit of students living in the Lona Estella Davis school district of Rowan County, to be used as scholarships at the Eastern Kentucky State College. These scholarships of $200.00 each are awarded by the superintendent of Rowan County schools and the president of the Eastern Kentucky State College. A student desiring to secure one of these scholarships should write to the Chairman of Student Aid Society, Eastern Kentucky State College, or make application to the Superintendent of Rowan County Schools.

Music Scholarships.—The College awards annually three scholarships of $54.00 each to those students who make the most satisfactory progress in piano, voice, and violin.

Science Club Medal.—The Science Club presents annually a medal to that senior majoring in any of the sciences who has achieved the highest standing in science during his college course.

Regents Medal for Oratory.—The Regents of the College present annually a medal for the best oration given by a college student under the direction of the proper authorities.

Kappa Delta Pi Scholarship Award.—Delta Alpha Chapter of Kappa Delta Pi presents annually a medal to the sophomore with the highest scholastic standing.

Student Service Award.—An award presented annually by members of the Young Women's and Young Men's Christian Associations to that member of the graduating class who, during his or her four years at Eastern, has given the greatest measure of service to fellow students.

Fine Arts Series.—It is the purpose of Eastern to surround her students with every cultural advantage. To this end much time and effort are expended to provide programs by the foremost artists. Each student is able to attend these concerts at a very small expense.

Assembly Programs.—Regular and special College assemblies are held for students, faculty members, and visitors. A definite time is set aside in schedules for the regular assembly. Important

College matters are officially presented at assemblies and school spirit is cultivated. Assembly programs are designed as a part of the liberal education offered by the College. The programs consist of inspirational addresses, lectures of general interest, concerts, dramatic performances, class programs, and other numbers. The programs are given by guests, faculty members, and students.

Regular attendance at assemblies is required.—The Board of Regents has passed a resolution stating: "It is the opinion of the Board that assembly programs are a vital part of the instruction offered by a teachers college." They further say: "Because of its fundamental value, we expect both students and faculty members to attend these programs."

Church Affiliation.—Eastern is a state-supported institution and is, therefore, non-denominational. Several fine churches are located in Richmond and students are encouraged to attend the services.

Student Organizations.—The student organizations, societies, and clubs at Eastern are varied enough in their activities to include the interests of all the students. While the membership in them is voluntary, all students find it to their advantage to identify themselves with at least one of these activities. Students receive in these extra-curricular activities a type of training which is impossible for them to get in the classroom. The opportunity for social life among the students, along with the professional and intellectual interests, is a valuable feature of the student activities. Student organizations at Eastern include:

Department Clubs.—Agriculture, Canterbury Club (English Majors), Cercle Francais, Elementary Council (Elementary Education), Future Teachers of America, Home Economics Club, Industrial Arts Club, Mathematics, Music, Physical Education, Science, Sigma Lambda, Sigma Tau Pi, (Commerce Majors), Social Science, World Affairs.

Literary and Dramatic Clubs.—Alpha Zeta Kappa (Public Speaking and Debating), Little Theater Club, Great Books Foundation, Sigma Tau Delta.

Musical Organizations.—Choir, College Band, College Dance Orchestra, Madrigal Club (Upper-class Girls' Glee Club), Men's Glee Club, Messiah Chorus, Orchestra.

Professional Clubs.—Caduceus Club (Medicine, Dentistry), Phalanx Club (ROTC).

Regional Clubs.—Regional clubs are organized by students from various cities, counties, and sections of the State.

Religious Organizations.—Baptist Student Union, Christian Student Fellowship, Newman Club, Seabury Club, Wesley Foundation, Westminster Fellowship, Young Women's Auxiliary, Young Men's Christian Association, Young Women's Christian Association.

Miscellaneous Organizations.—"E" Club (Letter Students in Athletics), Kyma Club (Pep Club), Photo Club, College Red Cross Unit, Off-Campus Students.

Honorary Fraternities and Sororities.—Alpha Alpha Psi of Kappa Pi (National Honorary Art Fraternity), Alpha Psi Omega (National Honorary Dramatic Fraternity), Kappa Delta Pi (Honorary Educational Society), Pi Omega Pi (National Commercial Teachers), Cwens (National Honorary Society for Sophomore Women), Collegiate Pentacle (Senior Women Honor Society), and Kappa Iota Epsilon (Honorary Society for Sophomore Men).

Publications.—Eastern sponsors two types of publications; one is edited by the faculty and the other is edited by students.

Belles Lettres is a magazine of student writing edited and published by the Canterbury Club. It is issued twice a year.

The Eastern Kentucky Review is the official publication of the College.

The Eastern Progress is published semi-monthly by students and is the newspaper of the College.

The Milestone is the College Annual published each year by the representatives of the Senior Class. This publication contains photographic and statistical records of all organiaztions and events of the College year.

Alumni Association.—The purpose of the Alumni Association is to promote fellowship among the ever-increasing number of graduates and to stimulate a mutual interest between the Institution and her former students. All graduates and former students are considered members of the Alumni Association. Those who pay dues of $2.00 per year are active members. Dues should be mailed to the Alumni Secretary, Eastern Kentucky State College.

Extension Division.—Eastern provides, through the Extension Division, correspondence courses, extension class instruction, lecturers, and various types of public school service.

The correspondence courses are prepared and conducted by regular members of the faculty and are, in so far as possible, identical with resident courses. For further details see the Extension Division Bulletin or write to the Director of Extension.

Regular members of the faculty conduct extension classes in cities and communities where teachers desire to pursue work in class groups in practically the same way as they would in residence. The cost of extension class instruction is reasonable. For further details see the Extension Division Bulletin or write to the Director of Extension.

A maximum of 32 semester hours of the required 128 hours for a Bachelor's degree may be earned by correspondence and extension. One-half of the work required for the renewal of a certificate may be earned by correspodence and extension. Those who plan to teach and take work in the Extension Division should distribute the work over the year.

Correspondence credit is recorded as having been earned at the time of completion of the final test. The above restrictions are statewide and apply to all institutions alike.

Bureau of Appointments.—The Placement Bureau is maintained by the College to assist students and ex-students in obtaining positions and to aid superintendents, principals, and other public school officials to secure the best qualified individuals to fill their vacancies. No charge is made for this service.

STUDENT UNION BUILDING

ADMISSION TO THE COLLEGE

I. **Methods of Admission.**—Candidates for admission to Eastern may be approved in any of the following ways:

1. **By Diploma.** Graduates of accredited high schools are admitted by transcript if they show evidence of satisfactory personal characteristics and of ability to do college work. The general pattern of preparation for college should include two high school majors and one minor. Three units are required for a major and two units for a minor. One major must be in English.

2. **By Examination.** High school students who possess fifteen units may secure admission by passing prescribed examinations or by making scores on classification tests equal to those of the average student. Veterans who have eight units of high school work and who have passed the G. E. D. Test will be admitted to the freshman class. Veterans who have less than eight units may be admitted on the G. E. D. Test provided the test scores and the previous preparation indicate that the student is prepared to do college work.

3. **By special Approval.** Persons over twenty-one years of age who wish to pursue courses as special students, without reference to graduation, may be granted that privilege if they have adequate preparation for the desired courses.

4. **By Advanced Standing.** Students wishing to enter Eastern from other colleges of recognized standing must have complete official transcripts on file in the Registrar's Office showing a statement of honorable dismissal.

II. **Application for Admission.**—Applications for Admission to the Eastern Kentucky State College cannot be unconditionally approved until transcripts of credits are filed in the Office of the Registrar. As soon as possible after an Application for Admission and a Transcript of Credits are received, the candidate will be notified whether or not he is accepted.

It is the responsibility of the applicant to have the following items sent to the Registrar prior to the opening date of a term:

1. An application for admission, properly filled out by the applicant, should be made upon a regulation blank furnished by the Registrar.

2. A transcript of the secondary school credits, issued after graduation, should be mailed directly by the principal to the Registrar.

3. An official transcript of any college credits and a statement of honorable dismissal, regardless of whether or not the student received credit for the work, should be mailed directly to: The Registrar, Eastern Kentucky State College, Richmond, Kentucky.

STUDENT PROGRAMS AND REGULATIONS

Classification of Students.—Students shall be classified as indicated below upon the completion of the respective number of hours, provided that the student has removed all entrance conditions:

Freshman—Entrance requirements
Sophomore—26 semester hours
Junior—58 semester hours
Senior—90 semester hours
Graduate—Baccalaureate degree.

How Courses Are Numbered.—Courses are numbered according to the following plan:

Courses numbered 100 to 199 are primarily for freshmen.
Courses numbered 200 to 299 are primarily for sophomores.
Courses numbered 300 to 399 are primarily for juniors.
Courses numbered 400 to 499 are primarily for seniors.
Courses numbered 500 to 599 are for graduate students.

Grading System.—Grades are indicated by letters, to each of which is given a certain value in "grade points." The following is the interpretation placed upon the grading system:

Grade	Meaning	Grade Points Per Semester Hour
A	Excellent	3
B	Good	2
C	Average	1
D	Poor	0
F	Failure	0
I	Incomplete	
Z	Conditioned	

The grades, A, B, C, D, and F cannot be changed by the instructor. A grade of "D" gives credit toward a certificate or a degree if with such credits the student's standing is 1 or more. A grade of "I" shall be assigned only upon condition the student has been unable to complete the course on time because of unavoidable conditions. A grade of "I" must be made complete within one month after the student re-enters the Institution. All grades of "I" automatically become "F" if not completed at the end of a year. The grade of "Z" shall represent a degree of attainment inferior to that of a "D" and shall not entitle the student to any credit but shall promote him to a sequent course in the same department specified by the instructor or head of the department. On completion of this sequent course with a grade of "D" or higher, the mark of "Z" shall be changed automatically to a grade of "D".

The standing of a student is defined as the ratio of his total number of "grade points" to his total number of semester hours' credit. A student's point average is obtained by dividing the total number of points earned by the total number of semester hours undertaken. Courses in which the marks of Cr., W, or WP are recorded are not figured in computing the point average. In order for a student to fulfill the requirements for a certificate or a degree he must offer a number of "grade points" at least as great as the number of semester hours.

Student Load.—The normal load for a semester for undergraduate students is sixteen semester hours exclusive of Physical Education 110. The minimum load to be classed as a full-time student is twelve semester hours. Students who have established superior records in the Institution may be permitted to enroll for more than sixteen semester hours provided the approval of the Dean of the College is secured at the time of registration. The maximum load, however, shall not exceed twenty-one hours exclusive of Physical Education 110.

Correspondence work may be taken while in residence only on condition that it is counted as a part of the load. The combined load of correspondence and residence work can not exceed the amount the student may take in residence. This regulation applies regardless of the institution with which the student does correspondence work.

Scholarship.—For a semester the minimum standard of achievement which enables a student to re-enroll without question in the College is eight semester hours' credit and ten grade points. Students who fail to meet the above requirements may be readmitted on probation.

Withdrawal from Courses.—Necessary changes in courses must be made promptly after registration and should be approved by the Dean or the Director of Personnel. Permission to add a course will not be given after registration ends without special approval of the instructor. Approval to drop courses during the last month of a semester will not be given unless justified by conditions beyond the student's control.

Withdrawal from the College.—Occasionally home conditions or some other factors make it necessary for students to withdraw. In such cases the student must see the President and arrange for the withdrawal. Any student who quits school or withdraws without securing the approval of the President may not register again unless the President sees fit to reinstate him.

Official Schedule Changes.—The College reserves the right to cancel a course when the registration is not sufficient to warrant

its continuance, to divide classes if the enrollment is too large for efficient instruction, and to change instructors when necessary. Additional courses will be organized if the demand is sufficient.

General Requirements for the Baccalaureate Degrees.—The degree of Bachelor of Arts or Bachelor of Science is conferred upon those students who have completed an approved four-year curriculum. The minimum amount of credit required for the bachelor's degree is one hundred and twenty-eight semester hours of college credit exclusive of Physical Education 110. Not more than thirty-two semester hours of the work required for a degree may be earned by extension and/or correspondence. A candidate for a degree must have been in residence a minimum of thirty-six weeks (at least eighteen of which must have been in the senior year) and must have earned a minimum of thirty-two semester hours while in residence.

The curriculum which the student expects to follow for the completion of the requirements for the bachelor's degree must be filed in the office of the Dean of the College not later than the end of the junior year. The curriculum must be approved by the Dean of the College and by the major professor.

In order to be eligible to graduate a student should have a good proportion of his work in the upper division of the college. At least 43 semester hours of his work must be in courses numbered in the three and four hundreds.

Candidacy for Graduation.—A student planning to graduate in June should file application for a degree before the end of the first semester. Students who are planning to graduate in August should file application not later than the beginning of the second semester. Applications should be filed in the Registrar's Office. Fees for graduation are to be paid at the Business Office and receipts presented to the Registrar's Office.

Commencement.—Commencements are held at the close of the spring semester and at the end of the summer session. Students who are candidates for degrees are required to participate in the commencement exercises unless excused by the President. A student who completes the requirements for a degree during the fall semester will receive the degree at the following spring commencement.

Commencement Honors.—Students are graduated "With High Distinction" who attain a standing of 2.6 or higher for at least three years of residence work.

Students are graduated "With Distinction" who attain a standing of 2.4 up to 2.6 for at least three years of residence work.

A student who does only two years at Eastern may receive the appropriate commencement honors if he attains a standing of .2 greater than the above.

EXPENSES

Incidental Fees.—Incidental fees paid each semester entitle the student to limited health service, to use of the Library, to use of the Student Union Building, to attend certain Fine Arts programs, to a subscription to the "Eastern Progress," and to other services as directed by the Board of Regents.

Each semester per student (Includes Activity fee)	$39.50
Additional out-of-state fee per semester	20.00
Each semester for students carrying less than 12 hours per semester hour	3.00
Each semester for graduate students per semester hour	3.00

Laboratory.—The fees to be paid for laboratory courses are indicated in connection with descriptions of these courses in another part of this catalog. Laboratory fees cover the cost of materials and laboratory service furnished.

The Milestone.—Students who register at Eastern during the regular academic year are required to pay a fee of $6.50 for the College Annual.

Locker, Lock, Towel, and Uniform.—Students who use lockers in the Weaver Health Building are required to pay a rental of $2.50 per semester for use of locker, combination lock for locker, and towel. This fee includes laundry service for towels, bathing suits and gymnasium uniforms for the entire semester.

Students Activity Fee.—Students will pay an activity fee of $4.50 a semester which will entitle them to admission to all athletic events and to a limited number of programs and entertainments sponsored by the college. (This fee is included in Incidental Fee of $39.50).

Late Registration.—Students who register after the opening date of a semester are required to pay a late registration fee of $2.00.

Change of Schedule.—A fee of $1.00 will be charged for each voluntary change which a student makes in his schedule after it has been prepared and approved at the time of registration.

Graduation.—The graduation fee for baccalaureate degrees is $7.50. The fee covers the cost of diploma, cap and gown rental, and other expenses incidental to graduation.

The graduation fee for the Master of Arts degree is $15.00. The fee covers the cost of diploma and hood, and the rental of cap and gown.

Special Examinations and Services.—When it is necessary to give a special examination to a student after the scheduled time for

same a fee of 50 cents will be charged. This fee covers such services as physical examinations, classification tests, pictures, etc. A special examination as used here is not interpreted to mean examinations for entrance, course examinations, and examinations for advanced standing.

Transcript of Credits.—Each student will be given one transcript of his work without charge. There will be a fee of $1.00 for each additional transcript after the first one has been furnished.

Rate of Room Rent.—The rate of room rent varies from $31.50 to $45.00 per semester. Specific prices are listed under Living Accommodations.

Incidental fee (Includes Activity Fee)	$ 39.50*
Board, if all meals are taken in the college cafeteria.... Board may be more or less than this amount, depending on the needs of the individual student.	126.00
Room Rent ..... Room rent varies from $31.50 to $45.00 per semester for women and from $31.50 to $40.50 per semester for men.	38.00
Books and supplies approximately	20.00
Other expenses	15.00

The above estimate does not include laundry, clothes, and personal spending money.

Students who take private music lessons and/or laboratory courses must add the respective fees to the above estimates in calculating the total expenses for a semester. Music and laboratory fees are listed in connection with course descriptions.

All fees, including the incidental fee, are payable in advance. Board and room rent may be paid in two equal installments, one at the beginning of the semester and the other at the middle of the semester.

* Each semester for out-of-state students, $59.50.

THE LIBRARY

TEACHER-EDUCATION CURRICULA

Degrees.—The Curricula offered by the College have been planned and developed to meet the needs of students who desire to become teachers, supervisors, and administrators in the public schools. Curricula are offered for the preparation of elementary teachers; for teachers of the special subjects of agriculture, art, commerce, health and physical education, industrial arts, music, and vocational home economics; and for the preparation of high school teachers in fields of biology, chemistry, English, French, geography and geology, history, Latin, mathematics, and physics. These curricula lead to the baccalaureate degrees and the Master of Arts degree with right of certification.

The Bachelor of Arts Degree is conferred upon students who major in art, English, French, geography and geology, history, Latin, music, and social science.

The Bachelor of Science Degree is conferred upon students who major in agriculture, biology, chemistry, commerce, elementary education, health and physical education, home economics, industrial arts, mathematics, and physics.

The Master of Arts Degree is conferred upon students who complete the graduate program designed to meet the needs of teachers, supervisors, and educational administrators.

Specific Requirements for Certificates and Degrees.—The Codified regulations relative to teacher education and certification, approved by the Council on Public Higher Education and the State Board of Education and published by the State Department of Education, indicate minimum requirements for various types of certificates.

The Training Schools.—The campus laboratory schools enroll about 350 pupils and have fourteen supervising teachers. The organization includes the Elementary Training School of six grades located in Cammack Building, the Model High School of six grades located in University Building, and the one-room Rural Demonstration School of eight grades situated nearby on the College farm.

Pupils who attend the campus training schools come from the city and county in the surrounding community. The number of pupils for each grade is limited to thirty. Listed below are the annual registration fees in the elementary school and the high school:

Grades 1 to 6 inclusive	$20.00
Grades 7 to 12 inclusive	20.00

Educational philosophy and procedures are learned by teachers in training through directed observation and supervised practice. The aim is to exemplify in the laboratory schools progressive trends in educational practice.

College students in professional courses and in professionalized or special methods courses come into the training schools by appointment to observe. A limited number of students preparing to meet the requirements for a Provisional Elementary Certificate spend a half day in the school observing and participating for the semester. The school is used to a limited extent for experimental work in which college students generally participate.

Supervised Student Teaching.—Student teaching is done in the training schools or in affiliated public schools. Students wanting to do student teaching are expected to file applications twelve weeks prior to the term in which they are to do their student teaching. They must have had as much as one semester of resident work at Eastern, and all college credits should be on file in the Registrar's Office. They must also meet certain standards in general scholarship, special academic preparation, use of English, health, personality, and professional attitude.

PROVISIONAL ELEMENTARY CERTIFICATE *

The Provisional Elementary Certifiacte valid for three years shall be issued to a person who meets the general requirements of law and files a transcript of standard college credits showing the completion of the following curriculum:

General and Special Preparation:

Block I—English ..... 9 sem. hrs.
- Oral and Written Composition ..... 6 sem. hrs.
- Children Literature ..... 3 sem. hrs.

Block II—Science ..... 6 sem. hrs.

Block III—Social Studies ..... 9 sem. hrs.
- (a) A Study of Western Civilization ..... 6 sem. hrs.

  or
- (b) Introduction to Social Studies ..... 6 sem. hrs.
- (c) Separate courses in Social Studies ..... 3 sem. hrs.

Block IV—Fine Arts ..... 6 sem. hrs.
- Public School Art ..... 3 sem. hrs.
- Public School Music ..... 3 sem. hrs.

Block V—Health ..... 4 sem. hrs.
Basic Health including health education, diet, community health, individual health;
Physical education in the Elementary School including plays and games, corrective activities, recreation.

* Repealed as of September 1, 1953. After that date, the Provisional Elementary Certificate will be based on the four-year curriculum.

Block VI—Professional Education ..... 17 sem. hrs.
Child Growth and Development ..... 3 sem. hrs.
Techniques ..... 6 sem. hrs.
Teaching Reading
Teaching Arithmetic
Fundamentals of Elementary Education ..... 4 sem. hrs.

(Fundamentals of Elementary Education with 8 sem. hrs. of credit may be offered for the Provisional Elementary Certificate in lieu of 4 sem. hrs. in Fundamentals and 4 sem. hrs. in Supervised Teaching in those institutions which have approved laboratory facilities. In such cases the work must include directed observation and participation.)

Supervised Teaching ..... 4 sem. hrs.
Block VII—General Electives ..... 13 sem. hrs.
Guidance serves as a basis for choice of electives.

STANDARD ELEMENTARY CERTIFICATE*

The Standard Elementary Certificate valid for four years shall be issued to a person who completes a baccalaureate degree and meets the requirements for teaching in the elementary schools. This certificate may be re-issued or renewed every four years after three years of teaching experience during the life of the certificate or upon the presentation of one-half year of standard college or university work of graduate grade. The Standard Elementary Certificate may be extended for life upon the presentation of evidence that the holder has had three years of teaching experience in the elementary field during the life of the certificate and has completed the requirements for the Master's degree in a standard college or university. Upon application to the Department of Education, a person shall be issued the Standard Elementary Certificate if he files a transcript of credits showing the completion of the following curriculum for elementary teachers:

General and Specific Preparation

Block I—English ..... 18 sem. hrs.
Oral and Written Composition ..... 6 sem. hrs.
Children's Literature ..... 3 sem. hrs.
American Literature and World Literature ..... 6 sem. hrs.
English Elective ..... 3 sem. hrs.
Block II—Science ..... 12 sem. hrs.
Block III—Social Studies, including ..... 21 sem. hrs.
(a) A Study of Western Civilization
(b) Introduction to Social Studies
(c) Separate courses in social studies area ..... 12 sem. hrs.
Economics, History and Government, and Geography ..... 9 sem. hrs.
Block IV—Fine Arts ..... 12 sem. hrs.
Public School Art ..... 3 sem. hrs.
Elective in Art ..... 3 sem. hrs.
Public School Music ..... 3 sem. hrs.
Elective in Music ..... 3 sem. hrs.
Block V—Health ..... 6 sem. hrs.
Basic health including health education, diet, community health, and individual health; and Physical Education in the Elementary School including plays

* After September 1, 1953, the Provisional Elementary Certificate will be based on the four-year curriculum and the Standard Elementary Certificate will be based on a five-year curriculum.

and games, corrective activities, and recreation.... 4 sem. hrs.
Nutrition emphasizing the School Lunch Program, resources, and helping children with their diet.... 2 sem. hrs.

Block VI—Professional Education ..... 28 sem. hrs.
Child Growth and Development ..... 6 sem. hrs.
Techniques ..... 6 sem. hrs.
Teaching Reading
Teaching Arithmetic
Fundamentals of Elementary Education..... 8 sem. hrs.
Supervised Teaching ..... 8 sem. hrs.

Block VII—General Electives ..... 31 sem. hrs.
Guidance serves as a basis for choice of electives

PROVISIONAL HIGH SCHOOL CERTIFICATE

The Provisional High School Certificate valid for four years shall be issued to a person who completes a baccalaureate degree for the training of high school teachers. This certificate may be renewed every four years after three years' teaching experience, or upon presentation of one-half year of standard college or university work of graduate grade, earned since issuance or last renewal of the certificate. If the holder fails to teach the three years required for renewal or reissuance, the certificate may be renewed or reissued upon 4 semester hours of standard college or university work of graduate grade for each year he fails to teach upon the certificate. Upon application to the Department of Education, a person shall be issued the Provisional High School Certificate if he files a transcript of credits showing the completion of a curriculum which includes the following courses and standards:

A. **Minimum General and Code Requirements** 45 sem. hrs.

1. English—Minimum ..... 12 sem. hrs.
   Including Oral and Written Composition, Literature, and Speech (a separate course in speech is not required)
2. Health, Physical Education and Safety—minimum..... 6 sem. hrs.
3. Group or Field Requirements—minimum..... 27 sem. hrs.
   Each candidate must present not less than 27 semester hours of credit, distributed among not fewer than 6 semester hours in any field. Two of these groups must be in fields different from the major, minors, or area of concentration. One group may be in the same field but not in the same subject as the major or one minor.

The fields from which the 27 hours of credit may be selected are:
Fine Arts
Foreign Language
Mathematics
Philosophy and Psychology (Courses in Psychology submitted in partial fulfillment for professional requirements may not be used to satisfy a group requirement in this subject)
Science
Social Science
Vocational Subjects (Agriculture, Home Economics, Commerce, Industrial Arts, etc.)

B. **Teaching Majors and Minors**

1. A major shall require 24 semester hours, except a major in English shall require 30 semester hours,

and a major in Speech and Dramatics shall require 30 semester hours.

2. A minor shall require 18 semester hours.
3. Each curriculum shall require
   (1) an area of concentration, or
   (2) two majors, or
   (3) one major and one minor when credit in both is 48 semester hours (54 when English is included as a major)

C. **Professional Preparation** 18 sem. hrs.

1. Student Teaching ..... 8 to 9 hrs.
   The professional requirements for teachers shall be 18 semester hours, at least 8 of which shall be in student teaching. Practice teaching should include actual experience in all phases of a teacher's work with a minimum of 144 clock hours devoted to the total experiences and with not less than 90 clock hours in actual observation, participation, and teaching. . . . Practice teaching should be preceded and supplemented by observation and other types of experiences with children,, parents, and teachers in a variety of situations.
2. Other Professional Courses ..... 9 to 10 hrs.
   There shall be a minimum of 9 semester hours of Professional courses in addition to student teaching in the following areas:
   a. Child Growth and Development
   b. Fundamentals of Secondary Education
   c. Organization and Administration of the Public School System

D. **Completion of a Baccalaureate Degree**

STANDARD HIGH SCHOOL CERTIFICATE

The Standard High School Certificate valid for five years shall be issued to a person who meets the requirements of law and general regulations of the State Board of Education and files a transcript of credits showing the completion of the four-year curriculum for the training of high school teachers as prescribed by the Council on Public Higher Education, and who, in addition thereto, completes the requirements for a Master's degree in a standard graduate school.

CERTIFICATION OF ADMINISTRATORS AND SUPERVISORS

(Effective September 1, 1952)

The Provisional Certificate for Principalship for elementary schools, for secondary schools, or for 12-grade schools shall be based on fifteen semester hours of work selected from the professional curriculum at the graduate level on which the Standard Certificate for Principalship is issued.

This certificate shall be valid for four years and shall be renewed every four years upon basis of three years of successful experience as principal, plus six semester hours of college work at the graduate level.

The Standard Certificate for Principalship of elementary schools, secondary schools, or 12-grade schools shall be based upon the following:

Completion of the master's degree including the following thirty semester hours of graduate work:

Professional Curriculum .....21 sem. hrs.

Including the following areas or course content:

- The Elementary Curriculum
- The Secondary Curriculum
- The Elementary Principal
- The Secondary Principal
- Testing, Counseling, and Guidance
- Curriculum Development
- Supervision
- Internship
- Other Professional courses

Electives (may include courses other than Education) ..... 9 sem. hrs.

Any part of this curriculum which may have been satisfied in the undergraduate work may be accepted as satisfying the professional requirements of this curriculum at the graduate level, but not to be used to reduce the total number of graduate hours.

The Standard Certificate for Principalship is valid for continuous service provided the principal is not inactive for a period of four consecutive years.

The Provisional Certificate for Supervisors includes the following:

Completion of a four-year under-graduate curriculum leading to the Bachelor's Degree and certification at the level and/or in the subject or area in which the supervisor is to work.

Three years of successful teaching experience.

Professional Curriculum (Graduate level).....15 sem hrs.

- General Supervision (3 sem. hrs.)
- General Organization and Administration of local school units (3 sem. hrs).
- Curriculum Development (3 sem. hrs.)
- Courses selected in accordance with the type of supervision in which the holder of the certificate expects to engage (6 sem. hrs).

Any part of this curriculum which may have been satisfied in the under-graduate work may be accepted as satisfying the pro-

fessional requirements in this curriculum at the graduate level, but not to be used to reduce the total number of graduate hours.

This certificate shall be valid for four years and may be renewed on the basis of three years of experience as a supervisor and six semester hours of graduate credit. These six semester hours are to be selected from courses required for the Standard Certificate in Supervision.

The Standard Certificate for Supervisors include the following:

Completion of a four-year undergraduate curriculum leading to a degree and certification at the level and/or in the area in which the supervisor is to work.

Three years of successful experience as a supervisor.

Completion of the Master's Degree including at least thirty semester hours of graduate work including the following:

Professional Curriculum ..... 30 sem. hrs.

General Supervision (3 sem. hrs.)

General School Organization and Administration (3 sem. hrs.)

Curriculum Development (3 sem. hrs.)

Courses selected in accordance with the type of supervision to be performed (21 sem. hrs.)

Any part of this curriculum which may have been satisfied in the undergraduate work may be accepted as satisfying the professional requirements of this curriculum at the graduate level, but not to be used to reduce the total number of graduate hours.

The Standard Certificate for Supervisors shall be valid for continuous service provided the supervisor is not inactive for a period longer than four consecutive years.

The Provisional Certificate for Superintendency includes the following:

Completion of a four-year curriculum for the elementary or secondary certificate.

Four years of successful teaching experience in the elementary or secondary schools.

Completion of the Master's Degree in education administration or thirty hours of graduate work as follows:

Block I 6-9 sem. hrs.

School Finance; Kentucky School Law; Business Administration; School Building.

Block II 6-9 sem. hrs.

Curriculum Development and Supervision (approached from viewpoint of human growth and development from 12-grade school approach)

Block III 6-9 sem. hrs.

Organization and Administration of the school program; Role of Education in Society; Public Relations; Role of the citizen in determining the school program.

Electives 6-12 sem. hrs.

This certificate shall be valid for a period of four years and subject to renewal once upon basis of successful experience and completion of eight additional semester hours of standard college work required for the Standard Certificate for Superintendency.

The Standard Certificate for Superintendency shall be issued upon at least four years of successful experience as a superintendent, completion of the Master's Degree, and 24 semester hours of graduate work beyond that required for the initial certificate for superintendency, 12 hours of which shall deal with the professional job of the superintendent and at least 12 semester hours shall be done in an institution approved for offering work beyond the Master's Degree.

The Standard Certificate for Superintendency shall be valid for continuous service provided the superintendent is not inactive for longer than a four-year consecutive period.

The Provisional Certificate for Attendance Officers shall be issued initially to a college graduate who holds a legal teaching certificate or who meets the requirements for such a certificate, and who has had two years of recent experience as a teacher or experience as an attendance officer. This certificate shall be valid for one year. This certificate may be renewed for a period of one year on the basis of successful completion of the following course:

Problems of Attendance Officers—It is suggested that the content of this course include pupil accounting and pupil personnel.

Upon completion of six semester hours of course work dealing with such areas as the Community, the Family, and Social Case Study, and at least one year of experience as an attendance officer, the Provisional Certificate for Attendance Officers may be renewed for three years. Each renewal thereafter may be based upon two years' experience or upon six semester hours of standard graduate work. The courses required for renewal may be earned before or after first certificate is issued.

GENERAL AND PRE-PROFESSIONAL CURRICULA

Special Curricula.—A four-year curriculum in general education is offered. Completion of this curriculum entitles the student to receive the baccalaureate degree without right of teaching certificate.

The Institution also offers the courses needed by students who are preparing to enter medical schools, colleges of law, colleges of engineering, and so on.

Students who take their general and pre-professional work at Eastern are able to satisfy the entrance requirements of the leading schools of medicine, colleges of law, colleges of engineering, and other professional institutions.

CURRICULUM PREPARATORY FOR MEDICINE

Eastern offers a preparatory course for the study of medicine which, with modifications to meet special variations in requirements, complies with the general entrance requirements of medical schools. The curriculum outlined below also includes institutional requirements for graduation with a Bachelor of Science degree.

It is recommended that a student complete the four-year course of study at Eastern before transferring to a medical school. This gives the student obvious advantages in medical school and in later work. Furthermore, some medical schools require a four-year course for admission.

Students may elect to complete the outlined three years at Eastern and then use the first year of work from a Class A medical school to complete the requirements for the Bachelor of Science degree. Combination courses are subject to approval by Eastern and by the particular medical school.

Students who desire may take only two years for a premedical course. Many medical schools will not accept students with only two years of premedical training and Eastern does not recommend such a limited course.

SCIENCE—MEDICAL OR SCIENCE—DENTAL CURRICULUM

First Year

First Semester	Hours	Second Semester	Hours
Biology 121	5	Biology 122	5
Chemistry 111	5	Chemistry 112	5
English 101	3	English 102	3
Social Science	3	Social Science	3
	16		16

Second Year

Biology 342	5	Biology 347	4
Chemistry 211	4	Chemistry 212	5
Mathematics 107	3	Mathematics 113	3
Physics 131 or 201	5	Physics 132 or 202	5
	17		17

Third Year

Biology 481	4	Chemistry 312	5
Chemistry 310	5	Foreign Language	3
Commerce 230	3	Humanities (Eng. 212)	3
Foreign Language	3	Psychology 211	3
Humanities	3	Sociology 331	3
	18		17

Fourth Year*

Biology Elective	3	Biology 446	4
Chemistry 415	5	Elective	12
Elective	8		
	16		16

Two years of Foreign Language in college are recommended or the equivalent in high school. A student may omit Mathematics 113, Chemistry 211, or Biology 446, or Social Science if necessary to take 12 hours in a Foreign Language.

The courses listed in parentheses are recommended.

MEDICAL TECHNOLOGY

Students who are interested in becoming medical technicians may secure many of the required college courses at Eastern. The requirements for this type of work vary and the student should elect courses to meet particular requirements.

PRE-ENGINEERING CURRICULUM

A student may take one or two years of fundamental work at Eastern and then transfer to an engineering college without appreciable loss of credits if he chooses his courses wisely. The pre-professional requirements of a particular college of engineering should be chosen from Mathematics, Chemistry, Physics, and other basic subjects. Every Pre-Engineering student will receive help, upon request, from an advisor.

PRE-LAW CURRICULUM

Students may obtain at Eastern the pre-professional training necessary for entrance to any college of law. All standard law schools require two years of college work for admission and many law schools require three years of college before entrance is granted. No special curriculum is prescribed by the Association of American Law Schools. Students should take work in English, Speech, History, Government, Geography, Accounting, Sociology, Economics, and Psychology.

A student who completes three years of approved Pre-Law work at Eastern and transfers credit for the first year of work in an accredited law school will be eligible for a Bachelor of Arts Degree from Eastern if specific requirements have been met.

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* PLAN II:

Transfer credits from the regular first year course in a School of Medicine or a School of Dentistry.

SOCIAL WORK

Students who plan to do graduate work in social work or who plan to enter a field of social work with public or private agencies should concentrate on a modified major in the Social Sciences. The work should include Economics, Sociology, Psychology, History, and such additional areas as are needed for basic preparation. Opportunities for work are increasing in the child welfare, juvenile institutions, penal institutions, State social agencies, Federal services, the American Red Cross work, and in similar specialties.

PRE-VETERINARY MEDICINE

Since 1950, Kentucky students have had the opportunity of entering veterinary medical training at Alabama Polytechnic Institute, Auburn, Alabama, or at Tuskegee Institute, Tuskegee, Alabama. The State of Kentucky has made this possible through its participation in the Southern Regional Education program.

The State pays $1,000 per student per year through the Southern Regional Education Board to the institutions. Each year Alabama Polytechnic Institute holds ten places and Tuskegee Institute holds two places for entering students from Kentucky. These students must meet admission requirements of the schools. If admitted, Kentucky students have the same status as Alabama students. They do not pay out-of-state tuition.

The minimum education requirement for admission to the School of Veterinary Medicine, Alabama Polytechnic Institute, is the satisfactory completion of two years of study in an approved, accredited college or university. A total of 60 semester hours of college work must be completed with a grade point average of at least 2.25, which is the approximate equivalent of the numerical grade of 80. In addition to the above, applicants are required to meet the military and physical training requirements in effect at the institution attended.

The two years of college work must include:

	Sem. Hrs.		Sem. Hrs.
Freshman English	6	Organic Chemistry	6
American History	3	Botany	3
College Algebra	3	*Medical Vocabulary	3
General Chemistry	6	Types and Breeds of Farm Animals	3
General Zoology	6	Gen. Poultry Husbandry	3
Trigonometry	3	Animal Nutrition	3
Physics	6	**Electives	6

* Six semester hours of Modern Language may be substituted for Medical Vocabulary, or this course may be taken by correspondence by applying directly to the Director of Extension Teaching, Auburn, Alabama.

** It is recommended that the electives be selected from the following courses:

Public Speaking	Introduction to Business	Regional Geography
Principles of Economics	American Government	Introductory Accounting and Bookkeeping

Applicants who have completed the requirements for a B. S. degree in Agriculture with a scholastic average of at least 2.25 are qualified for admission.

In the selection of students for admission to the School of Veterinary Medicine the Committee on Admissions gives due consideration to the applicant's background, adaptability to the profession, age, scholastic record, and residence. Personal interviews and aptitude tests may be required.

OTHER PRE-PROFESSIONAL CURRICULA

The College affords courses for students who plan to do specialized work in nursing, library science, theology, and in other professional fields.

In addition to standard four-year pre-professional curricula, Eastern may approve specially arranged combined curricula. In these curricula, the student completes three years as outlined at Eastern to meet basic requirements and then transfers a year of successful work from a Grade A professional school in order to secure a B. S. or a B. A. Degree from Eastern Kentucky State College. This plan may shorten by one year the time needed for obtaining both a baccalaureate and a professional degree.

THE GRADUATE DIVISION

PURPOSE

The Graduate Division offers work leading to the degree of Master of Arts in Education. The graduate courses in Education and in minor areas are offered as part of the regular program of the College and are designed to improve classroom instruction and school administration. The graduate program is planned to meet the needs of teachers in elementary and secondary schools and to provide graduate education for school supervisors and administrators.

TYPES OF STUDENTS

Graduate courses are open to: (1) students who enter and become candidates for the degree of Master of Arts in Education; and (2) students who wish to broaden their education without reference to a graduate degree.

ADMISSION REQUIREMENTS

1. Applicants for admission to the Graduate Division must hold a bachelor's degree from an institution of recognized standing.

2. Official credentials should be filed with the Registrar of the College before entrance. These credentials must include, (a) a complete transcript of high school credits; (b) a complete transcript of college or university credits. If the transcript is not on file prior to entrance, admission will be tentative pending receipt and review of credentials.

3. Application for admission to the Graduate Division must be filed by a student with the Dean of the Institution. Admission to the Graduate Division does not necessarily imply admission to candidacy for the degree of Master of Arts in Education. If an application for admission or for candidacy is approved, a copy of the graduate student's plan of work must be kept on file in the Dean's Office. The major professor and/or members of the Advisory Committee should be consulted in formulating the program. However, the graduate student is expected to show independence in planning his program and in study.

REQUIREMENTS FOR THE MASTER'S DEGREE

1. A person may receive the degree of Master of Arts in Education when he has completed other requirements set out in these regulations and in addition thereto has completed a four-year

curriculum for the education of elementary or secondary teachers as prescribed by the Council on Public Higher Education or holds a certificate based upon four years of standard college preparation and valid for teaching in the state in which it was issued.

2. The student shall have an average standing of 2.0 and no credit shall be granted for a grade below "C".

3. Graduate students may take upper division courses but at least 50 per cent of all course work must be in courses open to graduate students only.

4. Requirements for the degree of Master of Arts in Education may be satisfied by one of the following plans:

Plan I—With a Thesis

The residence requirements shall be 36 weeks (no off-campus or extension work, or work in other institutions, except that six semester hours may be completed in another institution upon approval of the Dean).

The minimum course credit shall be twenty-four semester hours.

Plan II—Without a Thesis

The residence requirements shall be 36 weeks.

The minimum credit shall be 30 semester hours, 24 of which must be earned in residence; 6 semester hours may be completed in off-campus work or by extension, or in any other institution or other ways looked upon as desirable.

5. Every candidate for the degree of Master of Arts in Education shall present a minimum of 9 semester hours of graduate credit in professional education and must have had a minimum of 27 semester hours at the undergraduate level and/or graduate level.

The minimum time in which a student who does not have a minimum of 12 semester hours in education, upon being admitted to the graduate school, shall be 45 weeks to complete course requirements for the degree of Master of Arts in Education.

6. The remainder of the course work shall be determined by the institution in terms of the student's need, provided that it shall be upper division and/or graduate courses.

7. The student shall pass a final examination on all fields presented toward fulfillment of requirements for the degree of Master of Arts in Education.

8. Except as provided in item 4, transferred credit shall not be used to reduce either the residence requirements or minimum

number of semester hours required for the degree of Master of Arts in Education.

9. Teachers holding what would ordinarily be considered a full-time position shall not be permitted to receive graduate credit for more than 4 semester hours during any semester.

10. Residence credit for part-time study at the graduate level shall be 1½ weeks for each semester hour of credit and shall apply to students who carry less than a minimum full-time load.

11. One-half of the course requirements and one-half of the residence work shall be done as a full-time graduate student. In evaluating residence credits a summer term of 8 weeks with a minimum load of 6 semester hours of credit shall be regarded as 9 weeks in residence.

12. The average graduate student, unless special approval is secured from the Dean, should take a load ranging from 12 to 16 hours per semester with a maximum of 8 hours per summer term of 8 weeks.

13. Part-time graduate students with full-time positions are advised to take loads ranging from 2 to 4 hours per semester and are expected to meet the high standards prescribed for full-time students.

14. Twelve hours of graduate work earned on a part-time basis shall entitle the student to one semester of residence.

15. Those graduate students who plan to take the degree of Master of Arts in Education will be expected to take a comprehensive qualifying examination before they have proceeded very far with their graduate program. The results of this examination will be used as a basis for guidance.

16. A candidate for the degree of Master of Arts in Education will be expected to take at least 9 semester hours of credit in one or more of the following fields: art, biology, chemistry, commerce, English, French, geography, health and physical education, history, home economics, industrial arts, Latin, mathematics, music, physics, science, and social science.

SEMINAR REQUIREMENTS

Seminars or research courses are required of graduate students. Two types of seminar are provided: (1) for graduate students who prepare a Master's thesis and (2) for students who do not prepare a thesis.

THE THESIS

The thesis should show, among other things, the following characteristics: (a) ability of the candidate to work independently

on an approved problem; (b) a reasonable familiarity with the literature of the field of specialization; (c) a practical working knowledge of research methods; and (d) conclusions justified by supporting data.

The thesis must conform to regulations approved by the Graduate Committee for writing theses. It must be approved by the major and minor professors and by the Dean of the College.

Two typewritten copies of the thesis must be filed in the College Library at least one week before the degree is conferred.

EXAMINATIONS

Before the graduate student can become a candidate for the Master's degree he must take a preliminary or qualifying examination. This examination is given each semester and each summer term. At least one-half of the work required for the degree must be completed after the qualifying examination.

The graduate student shall, upon official notification, pass an oral and/or written examination on his major, his minor fields, and his thesis.

APPLICATION FOR DEGREE

Application for the degree of Master of Arts in Education must be filed formally with the Dean of the College not later than the tenth week prior to the date on which the degree is to be conferred. The application should have the approval of the major professor and/or the Advisory Committee.

Formal application for the degree of Master of Arts in Education must be filed with the Registrar with the approval of the Dean of the College not later than eight weeks before the degree is to be conferred.

(Recommended Courses for Graduate Students in Elementary Education)

	Hours
Education 515, 536, 550, 569	10
Education 409, 421a, 512	7
Education 565 or 566 or 567	4
	21

Electives selected from subject matter courses such as:

Art 361	3
English 319	2
Geography 501	3
Health 365	2
History 461	3

Music 363	2
Physical Education 366	1
The above courses are intended to be suggestive only	9
	30

(Recommended Courses for Graduate Students in Secondary Education)

Education 515, 536, 550, 569	10
Education 512, 516	5
Education 464, 563	6
Electives selected from subject areas in accordance with type of teaching to be done	9
	30

(Recommended Courses to Meet the New Requirements for the Certification of School Administrators and Supervisors)

I. For Superintendents:

Education 515, 536, 550, 569	10
Education 501, 502, 503, 505	8
Education 511	3
Electives	9
	30

II. For Supervisors:

Education 515, 536, 550, 569	10
Education 511, 512, 516	8
Education 510 or 563	3
Electives selected from courses in accordance with type of supervision to be performed	9
	30

III. For Principals:

Education 515, 536, 550, 569	10
Education 512, 516, 562	3
Education 510 or 511 or 563	3
Electives	9
	30

AREAS OF CONCENTRATION

Eastern offers areas of concentration in the following fields:

Business Education
English
Foreign Languages
Home Economics
Industrial Arts
Music
Science
Social Science

Eastern offers majors in the following subjects:

Agriculture
Art
Biology
Chemistry
Commerce
English
French
Geography and Geology
Health and Physical Education
History
History and Political Science
Home Economics
Industrial Arts
Latin
Mathematics
Music
Physics

Eastern offers minors in the following fields:

Agriculture
Art
Biology
Chemistry
Commerce
Dramatics and Speech
English
French
Geography
Geography and Geology
Health and Physical Education
History
History and Political Science
Home Economics
Industrial Arts
Latin
Mathematics
Music
Physics
Spanish

COURSES OF INSTRUCTION

The Departments of Instruction on the following pages are arranged in alphabetical order. Schedules are prepared on the basis of recommended curricula. Student who follow the recommended curricula will avoid most conflicts.

CAMPUS SCENE
Amphitheater

AGRICULTURE

The University of Kentucky and the Eastern Kentucky State College are cooperating in the preparation of Vocational Agriculture teachers and in providing other training in Agriculture.

In accordance with this plan, Eastern will offer two years of the curriculum leading to the degree in Agriculture at the University of Kentucky. Hours earned beyond the sophomore level may not be transferable. Upper division courses are offered for the convenience of students who plan to gradate at Eastern with a field or minor in Agriculture.

All courses given in the Eastern Kentucky State College will constitute a part of the regular program of instruction of the College of Agriculture and Home Economics of the University of Kentucky and will carry both course and residence credit toward the degree of Bachelor of Science in Agriculture awarded by the College of Agriculture and Home Economics.

AGRICULTURE

(Recommended curriculum for a major in Agriculture)

First Year

First Semester	Hours
*Agriculture 125	3
*Agriculture 126	3
Agriculture 211	3
Biology 121	5
English 101	3
Physical Education 110	½
Elective (Mil. Sci.)	2
	16½

*Schedule one course

Second Semester	Hours
*Agriculture 125	3
*Agriculture 126	3
Agriculture 131	3
Biology 122	5
English 102	3
Mathematics Elective	3
Physical Education 110	½
Elective (Mil. Sci.)	2
	19½

*Schedule one course

Second Year

Agriculture 243	3
Agriculture 251	3
Chemistry 111	5
Commerce 230	3
Geology 301	3
Physical Education 110	½
Elective (Mil. Sci.)	2
	19½

Agriculture 252	3
Agriculture 215	3
Agriculture 221	3
Agriculture 241	3
Chemistry 112	5
Physical Education 110	½
Elective (Mil. Sci.)	2
	19½

AGRICULTURE

LOWER DIVISION COURSES

Agriculture 125. (Formerly Agriculture 25.) Farm Livestock Production. **Three hours.**

Importance and use of livestock products; present types; market classes and grades of beef cattle, sheep, swine, horses and mules; the origin, development, and characteristics of the more important breeds. Lecture three hours, laboratory one hour.

Agriculture 126. (Formerly Agriculture 11.) Farm Poultry Production. **Three hours.**

Principles of poultry husbandry, breeds and poultry improvement; selection and culling; incubation and brooding; feeding, housing and disease control; marketing poultry products. Lecture three hours, laboratory one hour.

Agriculture 131. (Formerly Agriculture 12.) General Horticulture. **Three hours.**

A study of the basic principles of fruit and vegetable production; hot bed and cold frame management; garden and orchard planning. Lecture three hours.

Agriculture 152. (Formerly Agriculture 352.) Farm Motors. **Three hours.**

Operation and repair of motors, tractors and tractor equipment. Fundamental principles governing the selection and care of this equipment on the farm. Lecture one hour, laboratory four hours.

Agriculture 200. Apiculture. **Three hours.**

The anatomy of the honey bee; the colony, location and equipment of the apiary; production of comb and extracted honey; diseases and enemies of bees; observation and manipulation of beekeeping equipment. Lecture two hours, laboratory two hours.

Agriculture 211. (Formerly Agriculture 20.) Elementary Farm Crops. **Three hours.**

A study of field crop production; pacture management; weed control; crop rotation; inoculation; tillage; and seed selection. Lecture three hours.

Agriculture 212. Market Grain Grading. **Two hours.**

Prerequisite: Agriculture 211.

Classification and grading of market grains. Lecture one hour, laboratory two hours.

Agriculture 215. (Formerly Agriculture 30 and 315.) Soils. **Three hours.**

Prerequisites: Two semesters of general chemistry.

Soil origin, classification, and properties; soil conservation; soil microorganisms; organic matter; soil water; soil minerals; lime; commercial fertilizers; soil erosion; and soil management. Lecture three hours.

Agriculture 221. (Formerly Agriculture 31 and 321.) Principles of Animal Nutrition. **Three hours.**

Prerequisite: Chemistry 111.

Digestion, absorption, assimilation and utilization of nutrients by domestic animals; principal feeds, rations and nutritive ratios. Lecture three hours.

Agriculture 223. (Formerly Agriculture 21.) Farm Dairying. **Three hours.**

Milk as a food; market milk; milk sanitation; dairy inspection; bacteriology of milk; scoring milk and cream; laboratory tests for various dairy products; production costs; pasteurization; refrigeration. Lecture two hours, laboratory two hours.

Agriculture 224. (Formerly Agriculture 22.) Dairy Cattle Management. **Three hours.**

Dairy cattle breeds; judging; feeding; calf raising; pedigrees; production; testing; dairy barn construction; equipment. **Lecture three hours.**

Agriculture 240. (Formerly Agriculture 440.) Soil conservation. **Three hours.**

Prerequisite: Agriculture 215.

Conservation of soils and their fertility erosion and control; soil conservation methods for individual farms. Lecture three hours.

Agriculture 241. (Formerly Agriculture 41 and 441.) Agriculture Economics. **Three hours.**

Prerequisite: Commerce 230.

The problems of economics as applied to agriculture; a study of the agricultural industry from historic, geographic and economic approaches. Lecture three hours.

Agriculture 243. (Formerly Sociology 14.) Rural Sociology. **Three hours.**

Historical backgrounds; movements, resources, and problems of rural communities; rural-urban relationships; rural people; problems of rural youth; agriculture and its problems of adjustment; community organizations and institutions; adult education; public health; rural recreation; social welfare; community organization and local government; relationship of the school to other institutions and agencies of the rural community; location and use of educational materials and resources of the community; state and national policies for the improvement of rural society. Lecture three hours.

Agriculture 244. Agricultural Entomology. **Three hours.**

Prerequisite: Biology 122.

A study of the insect structure, biology, and classification; life histories, habits, and control of insects injurious to farm crops. Lecture one hour, laboratory four hours. Fee, $1.50.

Agriculture 250. (Formerly Agriculture 23.) Farm Shop. **Three hours.**

Care and repair of farm tools; tool grinding; soldering; painting; concrete work; shop exercises in the construction of farm equipment. Lecture one hour, laboratory four hours.

Agriculture 251. (Formerly Agriculture 24.) Farm Structural Engineering. **Three hours.**

The construction, care and repair of farm buildings and equipment. Includes study and practice in farm surveying; drainage; terracing; and exercises involving the use of the transit and level. Lecture one hour, laboratory four hours.

Agriculture 252. (Formerly Agriculture 34.) Mechanics of the Farmstead. **Three hours.**

Selection and care of farm machinery; electric motors; power transmission; care and repair of electric equipment in the home and on the farm. Lecture one hour, laboratory four hours.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Agriculture 304. (Formerly Health 31.) Dairy Bacteriology. **Five hours.**

Prerequisite: Health 303.

Control of microorganisms in dairy and food products; bacterial analysis of dairy and food products; sanitation on the farm. Lecture two hours, laboratory four hours.

Agriculture 312. Advanced Crops: Forage Crops. **Three hours.**

Prerequisites: Agriculture 211 and Biology 121.

A study of the practices and principles of forage crops, especially grasses and legumes suited to Kentucky farms. Lecture three hours.

Agriculture 325. (Formerly Biology 35.) Genetics. **Three hours.**

Prerequisite: Science 112 or Biology 121 or 122.

The elementary principles of heredity and their relationship to plant and animal breeding; the chromosome theory of heredity, linkage, crossing over, interference; biometrics. Lecture three hours. Fee, $1.50.

Agriculture 327. (Formerly Agriculture 44 and 227.) Beef Production. **Three hours.**

Prerequisites: Agriculture 125 and 221.

History and importance of the beef cattle industry; selection, breeding, feeding and management of beef cattle. Lecture two hours, laboratory two hours.

Agriculture 328. (Formerly Agriculture 26 and 228.) Pork Production. **Three hours.**

Prerequisites: Agriculture 125 and 221.

Types and breeds of swine; selection; breeding; feeding; disease control. Lecture two hours, laboratory two hours.

Agriculture 329. Sheep Production. **Three hours.**

Prerequisites: Agriculture 125 and 221.

History and importance of the sheep industry; selection, breeding, feeding and management of sheep; production and handling of wool. Lecture two hours, laboratory two hours.

Agriculture 345. (Formerly Agriculture 32.) Farm Management. **Three hours.**

Prerequisites: Commerce 230 and Agriculture 241.

Factors affecting the organization and management of farms; cost of production; profits; types of farming; soil management; cropping systems; livestock enterprises; farm labor; rental agreements; farm machinery and equipment; farm layout. Lecture three hours.

Agriculture 346. (Formerly Agriculture 42.) Agricultural Journalism. **Three hours.**

Livestock advertising; sales letters; news letters; minute recording; feature articles; survey of agricultural journals; editorial writing. Lecture three hours.

Agriculture 347. (Formerly Agriculture 33.) Farm Accounting. **Three hours.**

The fundamental principles of accounting applied to farm accounts; financial statements; depreciation; production costs. Lecture three hours.

Agriculture 350. Animal Hygiene. **Three hours.**

A study of the measures designed to promote health and prevent diseases of livestock. Special consideration given to feed and water, housing and ventilation, yards and pastures, sanitation and environment. Lecture three hours.

Agriculture 442. Marketing. **Three hours.**

Prerequisite: Agriculture 241.

A study of the problems involved in marketing farm produce; livestock markets; classes and functions of middlemen; grading and standardization; wholesaling and retailing; transportation and storage; financing; prices; speculation; cooperative markets. Lecture three hours.

ARTS BUILDING

ART

(Recommended curriculum for a major in Art with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Art 117	3	Art 118	3
English 101	3	English 102	3
Physical Education 110	½	Physical Education 110	½
Science 109 or 111	3	Science 110 or 112	3
Social Science 100	3	Social Science 101	3
Sociology 100	1	Sociology 101	1
Second Major or Minor	3	Second Major or Minor	3
	16½		16½

Second Year

Art 200	3	Art 201 or 202	3
English 211	3	Art 217	2
*General Education Elective	3	English 212	3
Health 100	2	*General Education Elective	3
History 246	3	History 247	3
Physical Education 110	½	Physical Education 110	½
Second Major or Minor	3	Second Major or Minor	3
	17½		17½

Third Year

Art 260	3	Art 322	3
Art 390	3	Education 216	3
Education 215	3	**General Education Elective	3
Health 201	3	Second Major or Minor	3
Music 271	3	Electives	4
Second Major or Minor	3		
	18		16

Fourth Year

Education 364	6	Art 361 or 461	3
Education 463	10	Education 384	3
		Second Major or Minor	3
		Electives	7
	16		16

* Music, Foreign Language, Mathematics, Philosophy and Psychology, Agriculture, Home Economics, Commerce, Industrial Arts, Military Science.

** This general education elective should be from the field of Science, Social Science, or the general education field elected in the sophomore year.

Recommended Curriculum for a Second Major in Art

A student with a first major in some other department may take the following courses for a second major in Art: 117, 118, 200, 201 or 202, 217, 260, 390, 322, 361 or 461.

Recommended Curriculum for a Minor in Art

A student with a major and a minor in other departments may take the following courses for a minor in Art: 117, 118, 200, 201 or 202, 322, 390, and 2 hours elective.

ART

LOWER DIVISION COURSES

Art 117. (Formerly Art 10). Drawing and Design. **Three hours.**

Orientation of the student to the basic knowledges and skills in art through the use of pencil, tempera, water color, and colored chalks. This foundation course is planned to develop an understanding and appreciation of the principles of creative design as applied to the visual arts.

Art 118. (Formerly Art 11.) Art Media. **Three hours.**

Prerequisite: Art 117, or a similar course in introductory art.

Designed to meet individual needs and abilities in a variety of problems in landscape, still life and figure drawing; media—charcoal, pen and ink, pastels, water color, tempera, pencil and oils.

Art 200. (Formerly Art 22.) Art Appreciation: Orientation. **Three hours.**

Designed to establish a basis for judgment and good taste in the consideration and use of art in daily living through the study of examples of architecture, sculpture, painting, weaving, the art of the book, and ceramics.

Art 201. (Formerly Art 20.) Drawing, Painting, and Composition. **Three hours.**

Prerequisite: Art 117.

Emphasizing technical skill and creative ability in the use of charcoal, pastels, oils, and water colors; study of still life; outdoor sketching; figure composition; artistic anatomy.

Art 202. (Formerly Art 21.) Ceramics and Ceramics Sculpture. **Three hours.**

Prerequisite: Art 117.

Creative experience in three dimensional composition given for the purpose of developing a stronger sense of plastic form; objects molded by hand, and on the potter's wheel.

Art 217. (Formerly Art 23.) Lettering and Poster Design. **Two hours.**

Development of ability to apply art principles in the production of hand lettering; lettering structure; spacing; poster design.

Art 218. Advanced Lettering and Commercial Design. **Two hours.**

Prerequisite: Art 217.

Designed to meet the needs of those who wish to pursue lettering as a commercial phase of art; problems in block printing and silk screen; folders and advertising layout.

Art 219. (Formerly Art 29.) Design. **Two hours.**

Designed to meet the needs of the major in Art, Industrial Arts, and Home Economics. Formal drill in the elements of design to meet the needs of the student who wishes to become more efficient in the creative experience in structural and decorative design.

Art 220. (Formerly Art 24.) Problems in Interior Design. **Two hours.**

Prerequisite: Art 117.

A survey of the principles of design in all interiors: art elements—color, form, and line in furniture and furnishings; problems in house plans and blueprint reading.

Art 221. (Formerly Art 25.) Fashion Illustration. **Two hours.**

Prerequisite: Art 117.

Problems designed to develop the student's ability to represent the costume in different art media and to help him understand technical problems of fashion illustration; commercial layouts; readings in the history of costume.

Art 227. (Formerly Art 27.) Applied Design. **Three hours.**
Prerequisite: Art 219.
Development of craftsmanship in the use of design as applied to weaving, enameling, leather tooling, stenciling, linoleum cuts, and needle work.

Art 228. (Formerly Art 28.) Advanced Applied Design. **Three hours.**
Prerequisite: Art 227.
This course emphasizes design in weaving and advanced leather tooling. Rugs and table mats are woven from waste and commercial materials on the various looms, such as card, tack, and large two- and four-heddle types.

Art 260. (Formerly Art 26.) Public School Art. **Three hours.**
Designed to meet the needs of the classroom teacher in understanding the place of art in the general curriculum of the elementary school by correlation and integration, and by appreciation as a special subject. Problems are used to develop art skills, and to enable the teacher to understand the interests and abiilties of the child.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Art 321. (Formerly Art 30.) Drawing and Illustration. **Three hours.**
Prerequisite: Art 117.
Emphasizing skill in drawing and ilustration of ideas; specific study of perspective; pictorial composition; illustration of stories; murals; media—pencil, charcoal, water color, and ink.

Art 322. (Formerly Art 31.) Color and Design. **Three hours.**
Prerequisite: Art 117.
Color theory as related to pigments and sensation; practical color notation; application of color in design.

Art 361. (Formerly Art 36.) Art Education in the Elementary School. **Three hours.**
Prerequisite: Art 117 and 260.
Designed to give teachers a knowledge of the theory and practice of art in their school problems; unit planning; materials and methods.

Art 390. (Formerly Art 33.) Art Appreciation: Survey. **Three hours.**
A survey of architecture, sculpture, painting, and the minor arts; art of the Near East; classical art; medieval art; Renaissance art; post-Renaissance art; art in the United States; primitive art; Oriental art.

Art 421. (Formerly Art 40.) Advanced Drawing, Painting and Design. **Three hours.**
Studio practice in drawing, painting and design; orchestration of colors; research in artist's media—charcoal, pastel, oil, and water color.

Art 422. (Formerly Art 41.) Advanced Pictorial Composition. **Three hours.**
Painting from nature; field trips; studio criticism; creative design problems in decorative landscape and figure composition—pencil, pastel, water color, oil, and tempera.

Art 423. (Formerly Art 42.) Art Appreciation: Architecture and Sculpture. **Three hours.**
Prerequisite: Art 390.
Achievements in architecture and sculpture of the following periods: Prehistoric, preclassical, Greek, Roman, Early Christian, Byzantine, Romanesque, Gothic, Renaissance, American, and contemporary.

Art 424. (Formerly Art 43.) Art Appreciation: Painting. **Three hours.**
Prerequisite: Art 390.
Great periods and masters of painting: Italian, Flemish, German, Spanish, Dutch, English, French, and American.

Art 461. (Formerly Art 46.) The Arts in the High School. **Three hours.**
Prerequisites: Art 117 and 260.
Survey of art in the secondary schools for the purpose of examining the theories and practices in the rural and city high schools. Practice in planning units and courses of study which will give an understanding of our heritage in the arts, and an appreciation of art in daily living.

Art 462. Art Appreciation: Art Principles. **Two hours.**
Prerequisite: Art 424.
Designed for the study of aesthetic standards in architectural, sculptural and pictorial composition; current art principles; taste and evaluation; analysis of selected examples of art.

Art 463. Problems in Art. **One to three hours.**
Designed to meet the needs of students who wish to continue certain art projects started in other courses. Problems in painting, design, ceramics, and problems in research in the arts are considered. Limited to seniors and graduate students.

BIOLOGY

(Recommended curriculum for a major in Biology with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Biology 121	5	Biology 122	5
English 101	3	English 102	3
Mathematics 107	3	Mathematics 113	3
Physical Education 110	½	Physical Education 110	½
Social Science 100	3	Psychology 211	3
Sociology 100	1	Social Science 101	3
Electives	3	Sociology 101	1
	18½		18½

Second Year

Biology 342	5	Biology 229	3
Chemistry 111	5	Chemistry 112	5
English 211	3	English 212	3
History 246	3	Biology 335 or 345	2
Physical Education 110	½	History 247	3
		Physical Education 110	½
	16½		16½

Third Year

Biology Elective	3	Biology 325	3
Education 215	3	Biology 335 or 345	2
General Education Elective	3	Education 216	3
Geology 301	3	General Education Elective	3
Physics 131 or 201	5	Physics 132 or 202	5
	17		16

Fourth Year

Biology Elective	3	Education 364	6
Education 384	3	Education 463	10
Health 201	3		16
Health or Physical Education Elective	1		
Electives	6		
	16		

Recommended Curriculum for a Second Major in Biology

With right of teaching certificate.—A student with a first major in some other department may take the following courses for a second major in Biology: Biology 121, 122, 229, 325, 332 or 342, 335, 345, and electives to total 24 hours.

Recommended Curriculum for a Minor in Biology

A student with a major and a minor in other departments may take the following courses for a minor in Biology: Biology 121, 122, 229, 325, 335, 345.

BIOLOGY

(Recommended curriculum for a major in Biology without right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Biology 121	5	Biology 122	5
English 101	3	English 102	3
Mathematics 107	3	Mathematics 113	3
Physical Education 110	½	Physical Education 110	½
Social Science 100	3	Social Science 101	3
Sociology 100	1	Sociology 101	1
Elective	3	Elective	3
	18½		18½

Second Year

Biology Elective	5	Biology Elective	3
Chemistry 111	5	Chemistry 112	5
English 211	3	English 212	3
History 246	3	History 247	3
Physical Education 110	½	Physical Education 110	½
		Elective	3
	16½		17½

Third Year

Biology Elective	3	Biology Elective	3
Foreign Language	3	Foreign Language	3
General Education Elective	3	Physics 132 or 202	5
Physics 131 or 201	5	Elective	5
Elective	2		
	16		16

Fourth Year

Biology Elective	3	Biology Elective	3
Electives	13	Electives	13
	16		16

Recommended Curriculum for a Second Major in Biology

Without right of teaching certificate.—A student with a first major in some other department may take the following courses for a second major in Biology: Biology 121, 122, and 14 hours elective.

BIOLOGY

LOWER DIVISION COURSES

Biology 121. (Formerly Biology 12 and 20.) General Botany. **Five hours.**

Biology of plants. An introductory study of the structure, physiology, ecology and phylogeny of plants, with emphasis on basic biological principles. Three lectures and four laboratory hours. Fee, $1.50.

Biology 122. (Formerly Biology 11.) Biology of Animals. **Five hours.**

Prerequisite: Biology 121.

General Zoology. An introductory study of the structure, physiology, ecology, phylogeny and economics of animals, with emphasis on basic biological principles. Three lecture and four laboratory hours. Fee, $1.50.

Biology 200. Photography. **Two hours.**

Prerequisite: Permission of instructor. Does not count as credit toward a degree in biology.

The theory and use of cameras, films, filters; the theory and practice of developing, fixing, printing, enlarging, reducing and lantern slide making. One lecture hour and three laboratory hours. Fee, $1.50.

Biology 219. (Formerly Biology 29 and 29h.) Physiology. **Three hours.**

Offered for home economic students and for students who have not had Science 111 or Biology 122. Credit does not apply toward a major in Biology.

Fundamental principles of human physiology, with emphasis on the functioning of the circulatory, respiratory, digestive and excretory systems. Two lecture and two laboratory hours. Fee, $1.50.

Biology 225. (Formerly Biology 25.) Applied Anatomy. **Three hours.**

Prerequisites: Science 111 and 112, or Biology 122.

Anatomy of the human body, with emphasis on the skeleton, muscles and nervous system and their function in physical exercise. One lecture and four laboratory hours. Fee, $1.50.

Biology 229. (Formerly Biology 29.) Human Physiology. **Three hours.**

Prerequisite: Biology 122 or 225.

A study of the functions of the circulatory, respiratory, digestive, excretory, endocrine, nervous and reproductive systems. Two lectures and two laboratory hours. Fee, $1.50.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Biology 325. (Formerly Biology 35.) Genetics. **Three hours.**

Prerequisite: Science 112 or Biology 121 or 122.

Laws governing inheritance, variations and evolution in plants, animals and man; the role of heredity in the improvement of cultivated plants, domesticated animals and the human race. Three lecture hours.

Biology 332. (Formerly Biology 21.) Plant Morphology. **Three hours.**

Prerequisite: Biology 121.

A comparative morphology of the plant phyla. Two lecture and three laboratory hours. Fee, $1.50.

Biology 334. (Formerly Biology 32.) Plant Physiology. **Three hours.**

Prerequisite: Biology 121.

A study of the chemical, physical and biological processes which occur in vascular plants. Two lecture and three laboratory hours. Fee, $1.50.

Biology 335. (Formerly Biology 30.) Local Flora. **Two hours.**

Prerequisite: Biology 121.

The identification, classification and phylogeny of vascular plants; principle of taxonomy; field trips required. Four laboratory hours. Fee, $1.50.

Biology 336. (Formerly Biology 31.) Woody Plants. **Two hours.**

The identification and classification of local trees and shrubs; key construction. Four laboratory hours. Fee, $1.50.

Biology 342. (Formerly Biology 27 and 28.) Comparative Anatomy. **Five hours.**

Prerequisite: Biology 122.

Chordate characteristics and taxonomy; comparative anatomy of the principal organ systems: emphasis in laboratory upon lower chordate, fish, amphibian, bird and cat. Three lecture and four laboratory hours. Fee, $1.50.

Biology 343. (Formerly Biology 37.) Economic Entomology. **Three hours.**

Prerequisite: Biology 122.

Taxonomy, identification, life histories, physiology, economic importance, methods of control and collection of insects, with emphasis on local forms. One lecture and four laboratory hours. Fee, $1,50.

Biology 344. (Formerly Biology 38.) Bird Study. **One hour.**

Taxonomy, identification, habits and economic importance of birds, with emphasis on field observation of local species. Two laboratory hours.

Biology 345. Field Zoology. **Two hours.**

Prerequisite: Biology 122.

Taxonomy, identification, habits and economic importance of local animals, with emphasis on vertebrates. One lecture and two laboratory hours. Fee, $1.50.

Biology 347. (Formerly Biology 47.) Embryology. **Four hours.**

Prerequisite: Biology 342.

Detailed study of the embryology of the starfish, frog, and chicken, with some consideration of mammalian embryology. Two lecture and four laboratory hours. Fee, $1.50.

Biology 433. Economic Plants. **Three hours.**

The economic importance of plants and plant products; the utility of plants in relation to wood products, textiles, foods, condiments, beverages, drugs, poisons; the role of plants in ornamentation, conservation and world events. Three lecture hours.

Biology 441. (Formerly Biology 44.) Invertebrate Zoology. **Four hours.**

Prerequisite: Biology 122.

Characteristics, life histories, taxonomy, ecology and evolution of the invertebrates. Two lecture and four laboratory hours. Fee, $1.50.

Biology 444. (Formerly Biology 45.) Parasitology. **Three hours.**

Prerequisite: Biology 122.

The morphology, life histories, epidemology and methods of diagnosis and control of animal parasites, with emphasis upon those of man and domesticated animals. Two lecture and three laboratory hours. Fee, $1.50.

Biology 446. (Formerly Biology 46.) Histology. **Four hours.**

Prerequisite: Biology 342 or 229.

The histology of permanent animal tissues; the technique of the preparation of animal tissues for microscopic study. One lecture and six laboratory hours. Fee, $1.50.

Biology 481. (Formerly Biology 48.) Animal Physiology. **Four hours.**

Prerequisite: Biology 342.

Detailed study of the chemistry and physics of the physiological activities of animals. Two lecture and four laboratory hours. Fee, $1.50.

GRADUATE DIVISION COURSES

Biology 511. Advanced Biology. **Three hours.**

Prerequisite: A major or minor in biology and permission of instructor.

Individual study in fields of biology which are in advance of the work offered on the undergraduate level.

Biology 512. Principles of Biology. **Two hours.** A study of the basic principles of biology and their history

CHEMISTRY

(Recommended curriculum for a major in Chemistry with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Biology 121	5	Biology 122	5
Chemistry 111	5	Chemistry 112	5
English 101	3	English 102	3
Physical Education 110	½	Physical Education 110	½
Social Science 100	3	Social Science 101	3
Sociology 100	1	Sociology 101	1
	17½		17½

Second Year

Chemistry 211	4	Chemistry 212	5
English 211	3	Education 215	3
History 246	3	English 212	3
Mathematics 107	3	History 247	3
Physical Education 110	½	Mathematics 113	3
Psychology 211	3	Physical Education 110	½
	16½		17½

Third Year

Chemistry 310	5	Physics 132 or 202	5
Chemistry 415	5	Electives	11
Education 216	3		
Physics 131 or 201	5		
	18		16

Fourth Year

Education 384	3	Education 364	6
Health 201	3	Education 463	10
Health or Physical Education Elective	1		
Electives	9		
	16		16

Recommended Curriculum for a Second Major

A student with a first major in some other department may take the following courses for a second major in Chemistry: Chemistry 111, 112, 211, 212, 310.

Recommended Curriculum for a Minor in Chemistry

A student with a major and a minor in other departments may take the following courses for a minor in Chemistry: Chemistry 111, 112, 211, 212.

CHEMISTRY

(Recommended curriculum for a major in Chemistry without right of teaching certificate).

First Year

First Semester	Hours	Second Semester	Hours
Chemistry 111	5	Chemistry 112	5
Commerce 151	2	English 102	3
English 101	3	Mathematics 108	2
Mathematics 107	3	Mathematics 113	3
Physical Education 110	½	Physical Education 110	½
Social Science 100	3	Physics 107	1
Sociology 100	1	Social Science 101	3
		Sociology 101	1
	17½		18½

Second Year

Biology 121	5	Biology 122	5
Chemistry 211	4	Chemistry 212	5
English 211	3	English 212	3
History 246	3	Mathematics 251	5
Mathematics 232	3	Physical Education 110	½
Physical Education 110	½		
	18½		18½

Third Year

Chemistry 310	5	Chemistry 312	5
Foreign Language	3	Foreign Language	3
Mathematics 352	3	History 247	3
Physics 201	5	Physics 202	5
	16		16

Fourth Year

Chemistry 320	3	Chemistry 416	5
Chemistry 415	5	Physics Elective	3
Commerce 230	3	Elective	8
Physics Elective	3		
Elective	3		
	17		16

CHEMISTRY

LOWER DIVISION COURSES

Chemistry 111. (Formerly Chemistry 11.) General Chemistry. **Five hours.**
The fundamental theories and laws of inorganic chemistry; the preparation, properties, and uses of the more common elements and their compounds; explanation of chemical symbolism. Three lecture and four laboratory hours. Fee, $1.50.

Chemistry 112. (Formerly Chemistry 13). General Chemistry. **Five hours.**
Continuation of the laws and theories of inorganic chemistry; study of organic chemistry, electro-chemistry, and the metals. Three lecture and four laboratory hours. Fee, $1.50.

Chemistry 112b. General Chemistry. **Five hours.**
Subject matter similar to Chemistry 112 but emphasis on topics of importance to students majoring in Home Economics. In the course, the study of Organic Chemistry, Nutrition and similar subjects is made.

Chemistry 211. (Formerly Chemistry 21 and 22.) Qualitative Analysis. **Four hours.**
Prerequisites: Chemistry 111 and 112.
Reactions of cations and anions; solutions; equilibrium; oxidation and reduction; hydrogen-ion concentration and pH; complex-ion formation. Two lecture and four laboratory hours. Fee, $1.50.

Chemistry 212. (Formerly Chemistry 23 and 24.) Quantitative Analysis. **Five hours.**
Prerequisite: Chemistry 211.
The principles and use of the analytical balance; care and use of analytical equipment; preparation of solutions, quantitative and qualitative; solubility product and laws of precipitation and solution; principles of stoichiometry; quantitative determinations of common metals and nonmetals by gravimetric, volumetric and electrolytic methods. Two lecture and six laboratory hours. Fee, $1.50.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Chemistry 310. (Formerly Chemistry 26 and 27.) Organic Chemistry. **Five hours.**
Prerequisites: Chemistry 111 and 112.
Methane series and derivatives; ethylene series and derivatives; acetylene series and derivatives; polycyclic compounds; glucid, lipids, protids, and related compounds. Three lecture and four laboratory hours. Fee, $1.50.

Chemistry 312. (Formerly Chemistry 28.) Advanced Organic Chemistry. **Five hours.**
Prerequisite: Chemistry 310.
Aromatic hydrocarbons, aldehydes; phenols, amines, diazonium compounds; dyes, drugs, etc.; theory of color, molecular rearrangements, tautomerism, etc. Three lecture and four laboratory hours. Fee, $1.50.

Chemistry 313. (Formerly Chemistry 34.) Biochemistry. **Five hours.**
Prerequisite: Chemistry 310.
Qualitative tests for digested substances in vivo and in vitreo; chemical nature of muscle, blood and bone; enzyme action; urine analysis. Three lecture and four laboratory hours. Fee, $1.50.

Chemistry 320. (Formerly Chemistry 411 and 25.) Advanced Quantitative Analysis. **Three hours.**

Prerequisite: Chemistry 212.

Analysis of ores; potnetiometric determinations; the principle and use of the colorimeter and polarimeter; gas analysis; water analysis; soil analysis; combustion train. Six laboratory hours. **Fee, $1.50.**

Chemistry 415. (Formerly Chemistry 41.) Physical Chemistry. **Five hours.**

Prerequisite: Chemistry 212.

The nature of the gaseous, liquid and solid states; thermo-chemistry and thermodynamics; solutions; colloids. Three lecture and four laboratory hours. Fee, $1.50.

Chemistry 416. (Formerly Chemistry 42.) Physical Chemistry. **Five hours.**

Prerequisite: Chemistry 415.

Continuation of Chemistry 415. Chemical equilibria; phase rule; chemical kinetics; electrochemistry; ionic equilibria; atomic and molecular structure. Three lecture and four laboratory hours. Fee, $1.50.

Chemistry 430. (Formerly Chemistry 49.) Problems in Chemistry. **Three hours.**

Prerequisite: Senior standing in chemistry and departmental approval.

Research in inorganic, organic, analytical, physical or biochemical problems. Six laboratory hours. **Fee, $1.50.**

COMMERCE

CLASSIFICATION OF COMMERCE COURSES

For certification purposes commerce courses are classified as follows:

Accounting: 119, 120, 121, 325, 326, 327, 328, 425, 441.

Secretarial Practice: 131, 151, 152, 215, 216, 253, 280, 301, 302, 303.

General Business: 100, 124, 230, 231, 260, 309, 310, 311, 324, 339, 341, 343, 405, 406, 407, 430, 431, 432, 433, 440, 443.

Methods and Materials: 461a, 461b.

Commerce courses counted as Social Science:

Commerce 124, 230, 231, 260, 309, 310, 311, 324, 430, 431, 432, 433, 480, 490, 510, 511.

COMMERCE

(Recommended curriculum for a major in the area of Commerce with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Commerce 100	3	Commerce 152	2
Commerce 131	1	English 102	3
Commerce 151	2	Health 100	2
English 101	3	Physical Education 110	½
Physical Education 110	½	Psychology 211	3
Science 109 or 111	3	Science 110 or 112	3
Social Science 100	3	Social Science 101	3
Sociology 100	1	Sociology 101	1
	16½		17½

Second Year

Commerce 119	3	Commerce 120	3
Commerce 253	2	Commerce 215	3
Education 215	3	Commerce 280	1
English 211	3	Education 216	3
Health 201	3	English 212	3
History 246	3	History 247	3
Physical Education 110	½	Physical Education 110	½
	17½		16½

Third Year

Art 200	3	Commerce 302	3
Commerce 216	3	Commerce 230	3
Commerce 301	3	Commerce 221	3
Commerce 405	3	Commerce 461b	3
Commerce 461a	3	Education 332	2
Education 330	2	Music 271	3
	17		17

Fourth Year

Education 364	6	Commerce 309	3
Education 463	10	Commerce Elective	3
		Education 384	3
		Social Science Elective	3
		Electives	4
	16		16

A student with a major in some other department may take a major in Commerce with emphasis in Secetarial Practice, General Business, or Accounting. For the Secretarial Practice major the

following courses are required: 131, 151, 152, 215, 216, 230, 253, 302, 461a, and 5 hours elective. For the General Business major the following courses are required: 100, 119, 120, 151, 221, 230, 231, 309, 405, 461b. For the Accounting major the following courses are required: 119, 120, 151, 221, 230, 231, 309 or 405, 461b, and 5 hours elective in Accounting.

A student with a major and a minor in some other departments may take a minor in Commerce:

Com. 100, 151, 152, 119, 120, 5 hours elective, or
Com. 100, 151, 152, 119, 253, 215, and 216.

COMMERCE

(Recommended curriculum for a major in the area of Commerce without right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Commerce 100	3	Commerce 119	3
Commerce 131	1	Commerce 152	2
Commerce 151	2	English 102	3
English 101	3	Health 100	2
Physical Education 110	½	Physical Education 110	½
Science 109 or 111	3	Science 110 or 112	3
Social Science 100	3	Social Science 101	3
Sociology 100	1	Sociology 101	1
	16½		17½

Second Year

Commerce 120	3	Commerce 221	3
Commerce 230	3	Comerce 231	3
English 211	3	English 212	3
Health 201	3	History 247	3
History 246	3	Physical Education 110	½
Physical Education 110	½	Elective	3 or 4
Elective	2 or 3		
	17½ or 18½		15½ or 16½

Third Year

Art 200	3	Commerce 301	3
Commerce 405	3	Commerce 309	3
Commerce Elective	3	Commerce Elective	3
English 131 or 231 or 301 plus 2 hours	3 or 4	Music 271	3
*General Education Elective	3	Elective	3
	15 or 16		15

Fourth Year

Commerce Elective	9	Commerce Elective	6
Elective	7	Elective	10
	16		16

* Elect from Social Science, Science, or Fine Arts. The student may select this elective from some other field which may be used as general education, provided he elects at least three more hours in the same field.

COMMERCE

LOWER DIVISION COURSES

Commerce 100. (Formerly Commerce 126 and Commerce 14a and 14b.) Business Mathematics. **Three hours.**

Rapid calculation in the fundamental processes; drawings and graphs; percentage; buying and selling merchandise; commercial discounts; recording purchases and sales; paying for goods; collecting bills; accounts; fractions; aliquot parts; decimal fractions; payrolls; interest; installment buying; bank discount; partial payments; profit and loss; commission and brokerage; marked price; taxes; insurance; stocks; bonds; civil service problems.

Commerce 119. (Formerly Commerce 10.) Elementary Accounting. **Three hours.**

The accounting equation; the balance sheet; the profit and loss statement; books of original entry; the theory of debit and credit; the general ledger; adjusting and closing entries; the accounting cycle explained; using a minimum of books; subsidiary ledgers and controlling accounts. Practice sets of books are worked out by the students.

Commerce 120. (Formerly Commerce 11.) Principles of Accounting. **Three hours.**

Prerequisite: Commerce 119.

Credit transactions; promissory notes; interest; discount; valuation accounts; acrued and deferred items; business papers; the periodic summary; the theory of partnership accounting. A partnership set of books is worked out by the students.

Commerce 124. (Formerly Commerce 17.) Economic History of Europe. **Three hours.**

The history of the development of agriculture, commerce, transportation, industry, labor legislation, socialism, social insurance, population and population trends, and finance in the principal European nations.

Commerce 131. (Formerly Commerce 5.) Penmanship. **One hour.**

Characteristics of good handwriting; illustrations of good handwriting; practice in developing desirable skills in executing legible handwriting; methods of teaching handwriting.

Commerce 151. (Formerly Commerce 15a.) Beginning Typewriting. **Two hours.** Fee, $1.00.

Speed building technique; knowledge and care of the machine; personal and business letters; use of carbon paper; tabulating; term papers and notebooks.

Commerce 152. (Formerly Commerce 15b.) Intermediate Typewriting. **Two hours.** Fee, $1.00.

Prerequisite; Commerce 151 or its equivalent.

Speed building; business papers; manuscripts; reports; mimeograph; transcribing machine.

Commerce 215. (Formerly Commerce 27a.) Beginning Shorthand. **Three hours.**

Prerequisite: Commerce 151 or its equivalent.

Principles of Gregg shorthand; dictation and transcription.

Commerce 216. (Formerly Commerce 27b and part of Commerce 27c.) Advanced Shorthand. **Three hours.**

Continuation of Commerce 215.

Commerce 221. (Formerly Commerce 12.) Principles of Accounting. **Three hours.**

Prerequisite: Commerce 119, 120.

The voucher system; nature and characteristics of the corporation; corporation account and records; corporate earnings and surplus; corporation securities; accounting for manufacturing; departmental accounting; branch accounting; consolidated statements; budgets; personal accounting; analysis and interpretation of financial statements; accounting for management.

Commerce 230. (Formerly Commerce 28 and 29.) Principles of Economics. **Three hours.**

Economic problems and economic progress; some basic economic concepts; economic decisions under laissez-faire, a mixed economy, and socialism; the scale and location of production; the organiaztion of business; the rise of labor unions; social legislation of the 1930's; the nature of money; the supply of money; the demand for money; the control of money; demand and price; problems of the firm; problems of production: physical input and physical output; problems of production money costs and money returns; monoply and competition; the government and monopoly; distribution; wages; collective bargaining; rents; interest rates; profits; distribution of income in the United States; taxation.

Commerce 231. (Formerly Commerce 39.) National Income Analysis. **Three hours.**

The national income;—fluctuations in the real national income; the problem of index numbers; production and employment; production and prices; the cost of unemployment and the aim of full employment; some doubtful analyses and proposals; basic problems of employment; the encouragement of private expenditure for output; fiscal policy; the price level; inflation; the mechanics of international trade; aspects of international economics and issues of policy; economic systems; economic evolution.

Commerce 253. (Formerly Commerce 16a.) Advanced Typewriting. **Two hours.** Fee, $1.00.

Prerequisite: Commerce 152 or its equivalent.

Advanced typing problems; use of office machines.

Commerce 260. (Formerly Commerce 26.) Consumer Economics. **Three hours.**

The role of consumers in economic life; consumers' choice; who guides consumers; freedom of choice; custom-made wants; choosing goods for display; fashion-made wants; imitative wants; producer-made wants; the profitable practice of fraud; price appeal; maikng it easy to buy; consumer education; planning expenditures; intelligent buying; co-operative buying; buying protection; buying shelter; buying investments; producer aids to consumers; standards of consumers; governmental aids to consumers.

Commerce 280. (Formerly Commerce 18.) Filing. **One hour.**

Principles and practices of alphabetic, numeric, subject, and geographic filing.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Commerce 301. (Formerly Commerce 23.) Business English. **Three hours.**

The essential qualities of business writing; the sales letter; appeals to special classes; follow-up letters; inquiries, orders, and responses; cerdit letters; collection letters; adjustment letters; letters of application; business reports; style studies.

Commerce 302. (Formerly Commerce 27d.) Dictation and Transcription. **Three hours.**

Prerequisite: Commerce 301.

Shorthand vocabulary building; dictation; transcription of shorthand notes on the typewriter.

Commerce 303. (Formerly Commerce 27e.) Secretarial Practice. **Three hours.**

Correlation of business correspondence; shorthand; typewriting; secretarial problems; office experience.

Commerce 309. (Formerly Commerce 32.) Business Organization. **Three hours.**

Prerequisite: Commerce 230.

Classes of business organization, their evolution, and the tests of efficiency; individual entrepreneur organization; partnership; corporation; joint-stock company; business trusts; simple agreements and price combinations; pools; combination trusts; community-of-interest organization; holding company; amalgamations; mergers; promotion; underwriting; stock exchanges; reorganizations and receiverships; legislation.

Commerce 310. (Formerly Commerce 33a.) American Economic History. **Three hours.**

Historical development of commerce, industry, transportation, banking, labor problems, business organization, monetary problems, and agriculture in the United States from the settlement of the nation to the Civil War.

Commerce 311. (Formerly Commerce 33b.) American Economic History. **Three hours.**

Historical development of commerce, industry, transportation, banking, labor problems, business organization, monetary problems, and agriculture in the United States from the Civil War period to the present.

Commerce 324. (Formerly Commerce 38.) Money and Banking. **Three hours.**

Prerequisite: Commerce 230.

Nature and functions of money; kinds of money; monetary systems; history of banking; functions of the bank; bank administration; the national banking system; deposits and depositors; the clearing house; domestic and foreign exchange; loans and discounts; bank supervision; savings banks; trust companies; foreign banking system; the federal reserve system.

Commerce 325. Principles of Accounting—Advanced. **Three hours.**

Prerequisite: Commerce 221.

Accounting statements; the accounting process; cash and temporary investment; receivables; inventories; plant and equipment; intangible assets and deferred charges; liabilities; capital stock; surplus; errors and their corrections; statements from incomplete data; statement analysis; statement of application of funds.

Commerce 326. Principles of Accounting—Advanced. **Three hours.**

Prerequisite: Commerce 221.

Parnership formation and operation; partnership dissolution; joint ventures; installment sales; consignments; agency and branch accounts; corporate consolidation; the consolidated balance sheet; consolidated statements of profit and loss; the statement of affairs; receivership accounts and statements; accounting for estates and trusts; accounting for governmental units.

Commerce 327a. Cost Accounting. **Three hours.**

Prerequisite: Commerce 221.

Basic cost accounting terminology; the cost accounting cycle; accounting entries for the cost accounting cycle; the voucher register in cost accounting; special ledgers used in cost accounting; materials control and accounting; material inventory records; accounting for labor in cost accounting work; factory wage systems; manufacturing expenses; departmentalization of factory expenses; cost

summaries and financial statements. A job order cost set of books is worked by the students.

Commerce 327b. Specialized and Advanced Cost Accounting. **Three hours.**
Prerequisite: Commerce 327.

Process costs; applied process cost accounting procedures; budgetary control and cost accounting; estimated cost accounting procedures; standard costs; accounting procedures for standard costs; managerial reports; analyses and control through cost accounting; graphic presentation of cost data; non-manufacturing costs; uniform cost accounting system; a re-examination of cost accounting from the managerial viewpoint. A continuous process cost set of books is worked by the students.

Commerce 328. (Formerly Commerce 31.) Income Tax Accounting. **Three hours.**

Income tax legislation—Federal and State; returns for individuals; exempt income of individuals; deductions allowed individuals; computation of individual taxes; returns for corporations; accounting procedure; administrative procedure; the capital stock tax; the excess profits tax; the estate tax; the gift tax; excise taxes. Students will have experience filling out income tax return forms.

Commerce 339. (Formerly Commerce 34.) Mathematics of Finance. **Three hours.**

Bank discount; true discount and present value; exact interest; logarithms; equation of accounts; domestic and foreign exchange; series annuities; bond valuation; business graphs; cumulative annuities; cumulative sinking funds; cumulative amortization plans; building and loan association calculations; industrial loans.

Commerce 341. (Formerly Commerce 35.) Salesmanship. **Three hours.**

The art of selling; the motive behind all buying; the customer's mental journey; attitudes of buyer and salesman; preparation of the selling talk; the pre-approach; the interview; arousing interest; creating desire; answering objections; meeting excuses; diplomacy of the close; types of customers.

Commerce 343. (Formerly Commerce 37.) Advertising. **Three hours.**

The specific purpose of advertising; developing the copy; slogans; trademarks; layouts; engraving; scheduling of advertisements in newspapers and magazines; direct mail advertising; outdoor advertising; dealer display advertising; economic aspects of advertising; federal laws affecting advertising.

Commerce 405. (Formerly Commerce 40.) Business Law. **Three hours.**

Law in general; kinds of law; persons; torts; contracts; personal property; real property.

Commerce 406. (Formerly Commerce 41a.) Business Law. **Three hours.**

Agency; partnership; corporations; bailments; sales of personal property; market practices.

Commerce 407. (Formerly Commerce 41b.) Business Law. **Three hours.**

Negotiable contract, suretyship and guaranty; privilege of debtors; labor relations.

Commerce 425. (Formerly Commerce 46.) Accounting Problems. **Two hours.**
Prerequisite: Commerce 119, 120, 121.

This is an advanced course in accounting and the contents will be determined by the needs of the students registering for it.

Commerce 426. Payroll Accounting. **Three hours.**
Prerequisite: Commerce 221.

The ledger accounts; the weekly payroll; the semi-monthly payroll; monthly procedure, December payrolls; tax payments; the social security laws and regulations; the withholding porvisions of the federal income tax law; the federal

Fair Labor Standards Act; the laws and regulations relating to workmen's compensation insurance.

Commerce 430. (Formerly Commerce 42.) Public Finance and Taxation I. **Three hours.**

Distribution of government burdens; the general property tax; modified property tax; shifting and incidence of taxation; the income tax; death and gift taxes; taxes upon business; consumption taxes; motor vehicle taxes; the poll tax; social security taxes; taxes on natural resources; non-tax revenue.

Commerce 431. (Formerly Commerce 43.) Public Finance and Taxation II. **Three hours.**

A continuation of Commerce 430.

The power of tax; tax limitations; inter-governmental relations in taxation; public expenditures; state and federal aid; economy in expenditures; problems of public borrowing; fiscal administration.

Commerce 432. Alternative Economic Systems. **Three hours.**

Prerequisite: Commerce 230.

A somewhat detailed treatment of such topics as the following: capitalism; Utopian forerunners; the Marxian theory of socialism and communism; modern socialism and communism; British socialism; the economy of the Soviet Union; Fascism as existed in Italy and Germany; the Consumers' Cooperative Movement.

Commerce 433. Economics of Labor. **Three hours.**

Prerequisite: Commerce 230.

The labor force; trade-union growth; structure and government of the local unit; structure and government of the national unit; structure and government of the federations; trade-union collective bargaining; management: dealing with organized labor; dealing with unorganized labor; government policy toward collective bargaining; government policy toward the individual worker; the operation of the labor market: wages; seasonal aspects of employment; cyclical aspects of employment; technological aspects of employment; a full employment economy; the distribution of income.

Commerce 440. (Formerly Commerce 44.) Investment. **Three hours.**

Characteristics of bonds; characteristics of stocks; securities markets; investment banking; sources of investment information; interpreting financial news; taxation of securities; investors of limited means; analysis of securities.

Commerce 441. (Formerly Commerce 47.) Auditing. **Three hours.**

Preliminary arrangements for an audit; general procedure of an audit; the original records; the asset accounts; the liability accounts; operating accounts; the audit report. An auditing problem is worked to illustrate the principles discussed in class.

Commerce 443. (Formerly Commerce 45.) Marketing. **Three hours.**

Prerequisite: Commerce 230.

Consumer's buying motives; marketing functions and institutions; selling direct to consumer; earlier and simpler types of retail institutions; department stores; mail-order houses; chain stores; agricultural wholesale markets; middlemen of the city agricultural markets; classes and types of wholesaler; raw materials; cooperative marketing; speculation; prices and some price policies; brands and brand policies; ethical aspects of marketing.

Commerce 461a. (Formerly Commerce 36a.) Methods of Teaching Stenography. **Three hours.**

Prerequisites: Commerce 152 and Commerce 216 or their equivalent.

This course is a prerequisite to Student Teaching in Commerce. Survey of modern methods of teaching Gregg shorthand and typewriting; lesson planning and presentation; observation of classroom procedures; supplies and equipment; development of skill in writing shorthand on the blackboard.

Commerce 461b. (Formerly Commerce 36b.) Methods of Teaching Bookkeeping, Accounting, and General Business. **Three hours.**

Prerequisites: Commerce 221 or equivalent.

Objectives in giving bookkeeping, accounting, and general business courses; textbooks suitable for use; supplementary material; methods of approach; how to teach certain phases of our financial life; communication; travel and transportation; buying and selling; the work at the end of the fiscal period for bookkeepers and accountants, including accrued and deferred items, adjusting entries, working sheets, financial statements, closing entries; suitable examination.

Commerce 480. Contemporary Economic Problems. **Three hours.**

A general view of our economic system; problems of business enterprise; money; the fluctuation of the price level; employment and unemployment; prices; sharing the product of industry; international economic relations; labor problems; social security; public finance and taxation; alternative systems of economic organization.

Commerce 490. Workshop in Economic Education. **Three hours.**

Programs designed to create economic literacy; the organization of in-service education programs to promote economic literacy; methods of teaching economics in the elementary and high school; programs for adult education.

GRADUATE DIVISION COURSES

Commerce 510. (Formerly Commerce 50.) History of Economic Thought. **Three hours.**

In this course a survey of economic thought and doctrine from the ancient period to the end of the classical period will be made.

Commerce 511. (Formerly Commerce 51.) Economic Thought Since the Austrian School. **Three hours.**

This is a continuation of Commerce 510. The chief economical doctrines since the Austrian school will be studied.

CAMMACK BUILDING
The Elementary Training School

EDUCATION

(Recommended Curriculum for a Major in Elementary Education with Right of Provisional Elementary Teaching Certificate)

First Year

First Semester	Hours	Second Semester	Hours
Art Elective	3	English 102	3
English 101	3	Music 271	3
Physical Education 110	½	Physical Education 110	½
Science 109 or 111	3	Psychology 211	3
Social Science 100	3	Science 110 or 112	3
Sociology 100	1	Social Science 101	3
Elective	3	Sociology 101	1
	16½		16½

Second Year

Art 260	3	Education 216	3
Education 215	3	English 212	3
English 211	3	Health 201	3
Geography Elective	3	History 247	3
History 246	3	Music 260	3
Physical Education 110	½	Physical Education 110	½
		Physical Education 220	2
	15½		17½

Third Year

Education 354	3	Education 367	8
Education 360	3	Education 441	3
English 360	3	Home Economics 310	2
Science 361	3	Science 362	3
*Social Science Elective	3		
Elective	2		
	17		16

Fourth Year

Education 421a	2	Education 442	3
Education 463	8	*Social Science Elective	3
English 318	3	Elective	9
Elective	3		
	16		15

* Selected from Upper Division Courses in Economics, Geography, History, Government, Sociology.

EDUCATION

(Major in Elementary Education Arranged According to Subjects)

ART		6
260 Public School Art	3	
Elective	3	
EDUCATION		36
215-216 Human Development and Psychology	6	
354 Reading in the Elementary School	3	
360 Teachers' Arithmetic	3	
367 Fundamentals of Elementary Education	8	
421a Measurement and Evaluation in the Elementary School	2	
441 The Elementary School Curriculum	3	
442 Organization and Administration of Elementary Education	3	
463 Supervised Student Teaching	8	
ENGLISH		18
101-102 Oral and Written Communication	6	
211 Survey of Literature I	3	
212 Survey of Literature II	3	
318 Literature of the United States	3	
360 Literature for Children	3	
HEALTH AND PHYSICAL EDUCATION		9
Health 201 Public Hygiene and Safety	3	
Home Economics 310 Nutrition for Elementary Teachers	2	
Physical Education 110 Physical Education	2	
Physical Education 220 Plays and Games for the Elementary Grades	2	
MUSIC		6
260 Public School Music	3	
271 Enjoyment of Music	3	
PSYCHOLOGY		3
Psychology 211 General Psychology	3	
SCIENCE		12
109 Physical Science I or 111 Biological Science I	3	
110 Physical Science II or 112 Biological Science II	3	
Science 361 Nature Study I	3	
Science 362 Nature Study II	3	

SOCIAL SCIENCES		21
100-101 An Introduction to the Social Sciences	6	
246-247 History of Western Civilization	6	
Geography Elective	3	
Elective (Economics, Geography, History, Government, Sociology)	6	
SOCIOLOGY		2
Sociology 100-101 Orientation	2	
ELECTIVES		17
TOTAL		130

EDUCATION

LOWER DIVISION COURSES

Education 162. Teaching the Common School Branches. **Three hours.**

This subject covers the state course of study and is designed to acquaint the student with modern methods of teaching in small elementary schools. Among the topics treated are the state elementary-school course of study with special emphasis on reading, language, spelling, handwriting, arithmetic, social science, science, fine arts, and health and physical education; educative seatwork activities; measuring and evaluating instruction by the use of standardized and new type tests.

Education 190. (Formerly Education 19a.) Rural School Organization and Management. **Three hours.**

Organizing the rural elementary school; daily program; school housekeeping; understanding pupils; playground activities; school equipment and supplies; keeping records and making reports; problems of attendance; school libraries and the use of textbooks; educative seatwork and supervised study; school marks and marking systems; pupil classification and promotion; testing and evaluating results; community cooperation; teacher qualifications and relationships.

Education 211. (Formerly Education 21.) Psychology of Development and Education. **Three hours**

Problems in understanding human development and education; physical growth of the child and of the adolescent; language development; how behavior is motivated; development of emotional life; social development in childhood and adolescence; intellectual growth; the individual; the learner and the nature of learning in childhood and adolescence; personality development.

Education 215. Human Development and Psychology. **Three hours.**

Prerequisite: Psychology 211.

This course is designed to lead to an understanding of physical and psychological growth through the school years. The influences on growth of the home, school, church, and of other community factors are studied. Each student is assigned to a child to be systematically observed over a period of time. Selected films are used to help develop an understanding of human growth and development.

Education 216. Human Development and Psychology. **Three hours.**

Prerequisite: Education 215.

This course deals with problems of human development and personal adjustment. Attention is given to the adjustment of students in the course and

of the adolescent; to the problems which they have faced in the past. A case study of an adolescent is made in laboratory school during the course. Selected films are used to help the student form insightful interpretation of human development.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Education 301. (Formerly Education 30.) The Junior High School. **Two hours.**

Origin, development, and present status of the junior high school movement; the place of the junior high school in the public school system; the aims, purposes, and objectives of the junior high school; evaluation of types of programs; the junior high school plant; library, apparatus, and equipment of the junior high school.

Education 302. (Formerly Education 32.) Pupil Accounting. **Three hours.**

Relation of attendance to pupil progress; social and economic factors which affect attendance; school census; personnel records. In developing these topics a study will be made of personnel work in typical schools of Kentucky.

Education 303. Social Case Study. **Three hours.**

This course is designed for the training of attendance officers and covers a study of various approaches to understanding of the pupil with an educational setting as the basis of study. Some attention is given to social case work as it relates to the social and economic problems of the community.

Education 304. (Formerly Home Economics 36.) Vocational Home Economics Education. **Three hours.**

Prerequisite: Education 215 and 216.

The home economics teacher in the community; the needs of high school girls and the community; the planning of units of study and how to teach these through study of various teaching techniques.

Education 305. (Formerly Home Economics 300.) Adult Education. **Two hours.**

Explanation of adult education in homemaking. A study of the promotion and organization of classes, teaching techniques, and materials for adult classes in the home economics program. Observation and participation in adult classes. Study of extended month's work.

Education 330. Educational Sociology. **Two hours.**

Not open to graduate students.

This course is designed to give students some understanding of the social foundations of education in modern society. Institutions, social organiaztions, groups, social processes and their significance in education are examined. The relation of the school to all other agencies and the interrelation of culture and the educative process are considered. Special attention is given to a social evaluation of educational objectives, curriculum materials and teaching methods.

Education 332. Philosophy of Education. **Two hours.**

Not open to graduate students.

The meaning of education; educational values; education and democracy; the development of ideals; education as a necessity of life; education as growth; interest and discipline; thinking in education; the nature of subject matter and method; education and philosophy.

Education 345. Science in the Elementary School. **Three hours.**

A survey of the specialized problems of science education during the first eight grades. The emphasis is upon methods of instruction and more particularly

upon the development of a functional curriculum which interweaves all science with all phases of child development.

Education 354. (Formerly Education 164, 22, and 254.) Reading in the Elementary School. **Three hours.**

Objectives of reading in the elementary school; reading in the primary and intermediate grades; the place of oral reading in the grades; individual differences in reading; word difficulties; phonics; measuring reading instruction; motivation; materials of instruction.

Education 360. (Formerly Mathematics 26 and Education 260.) Teachers' Arithmetic. **Three hours.**

Developing an understanding of numbers; the place of arithmetic in the curriculum of the primary grades; increasing the child's understanding of numbers; teaching the fundamental combinations of addition and subtraction; elementary work in addition; elementary work in subtraction; teaching the fundamental combinations of multiplication and division; elementary work in multiplication; elementary work in division; Roman numerals; measures; fractions; the course of study; aims and objectives of arithmetic; assignments; examinations; the importance of accuracy and speed; value of drill; games; methods of teaching arithmetic; problem solving.

Education 364. (Formerly Education 36.) Fundamentals of Secondary School Methods. **Four or six hours.**

Prerequisites: One semester in residence at Eastern; standing of "C".

Graduated approach to responsible room teaching through experiences in study and discussion, organizing materials, directed observation, laboratory work, and gradual participation; development of the American secondary school; experiences in the study of pupil behavior; selection and organization of curriculum experiences; variation in techniques of teaching in different types of learning; learning objectives, interests, methods, and materials in special fields; experiences involving management and co-curricular duties; experiences in human relationship.

Education 367. (Formerly Education 26 and 267.) Fundamentals of Elementary Education. **Eight hours.**

Prerequisites: One semester in residence at Eastern; standing of "C".

Graduated approach to responsible teaching in the elementary school through experiences in study and discussion, directed observation, organizing materials, laboratory work, and gradual participation; experiences in the study of child behavior; the course of study; selection and organization of curriculum experiences; teaching the various school subjects; various types of teaching and learning techniques and devices; experiences in playground and noon-hour supervision; participation in community activities; techniques of guidance, counseling, testing, and evaluating pupil progress.

Education 368. (Formerly Mathematics 31.) Elementary Statistical Methods. **Three hours.**

Methods of collecting data; methods of tabulation of data; uses and purposes of statistical methods; central tendencies; deviations; correlations; graphic methods.

Education 369. Audio-Visual Methods. **Three hours.**

A survey of various types of audio-visual aids; with instruction in the utilization of pictures, maps, graphs, slides, records, recorders, projectors, and other audio-visual materials.

Education 370. (Formerly Education 37.) Resource-Use Education. **Three hours.**

This course is designed to help teachers understand the dynamic role of education in developing resources—natural, human, and cultural—and to aid them in making better use of resources in teaching. Topics: meaning and objec-

tives of resourse-use education; analysis of state, regional, and national resources; selecting and organizing resource materials for effective teaching purposes; use of field trips, visual aids, readings, and other activities; sources of materials from state, regional, and national agencies; types of aids available to teachers; state, regional, and national planning for the conservation and wise use of resources; some principles of resource-use education.

Education 384. (Formerly Education 47 and 383.) Organization and Administration of the School System. **Three hours.**

This course deals with the total school system and is designed to give the student a clear picture of the public school system as a whole. Among the topics treated are the study of and participation in experiences leading to an understanding of the principles and practices in the organization and administration of the total school system; study of the functions of education in a democracy; the scope and function of school organization and control; safety; audio-visual education, and other problems connected with the public school system in general.

Education 409. (Formerly Education 313.) Advanced Child Psychology. **Three hours.**

Prerequisite: Education 215.

This course is designed primarily for seniors expecting to teach, for experienced teachers and for teachers working toward a Master's Degree. Physical growth; motor development; mental growth; growth and achievement; human relations; individual and group relationships; concepts of child development in the administration of schools.

Education 410. (Formerly Education 314.) Advanced Adolescent Psychology. **Three hours.**

Prerequisite: Education 216.

Physical, intellectual and cultural backgrounds of adolescent behavior; areas of adolescent adjustment; the individual adolescent.

Education 421a. (Formerly Education 40.) Measurement and Evaluation in the Elementary School. **Two hours.**

Growth of measurement and evaluation; types of tests and evaluative procedures; test construction; selecting, giving, scoring, and interpreting tests; tests of intelligence and of special aptitudes; measurement and evaluation in arithmetic, language, spelling, handwriting, the social sciences, art and music, miscellaneous areas, and general achievement; uses of tests and evaluative techniques.

Education 421b. (Formerly Education 41.) Measurement and Evaluation in the Secondary School. **Two hours.**

Growth of measurement and evaluation; types of tests and evaluative procedures; test construction; selecting, giving, scoring, and interpreting tests; tests of intelligence and of special aptitudes; measurement and evaluation in language, mathematics, science, social studies, special subjects, general achievement, and personality adjustment; uses of tests and evaluative techniques.

Education 441. (Formerly Education 43.) The Elementary School Curriculum. **Three hours.**

Objectives of education in light of society; function of the school; function of the curriculum; the curriculum as related to the objectives of education and to society; criteria for evaluating curricula; need and procedure for curriculum construction and revision.

Education 442. (Formerly Education 42.) Organization and Administration of Elementary Education. **Three hours.**

Aims and objectives of the elementary school; types of elementary school organization; time allotments; attendance; library service; classification and promotion of pupils; health; publicity; special classes; plant; office management; organization for supervision; the principal and his opportunity for leadership.

Education 453. (Formerly Education 453 and 454.) Administration and Supervision of the Public School. **Three hours.**

This course deals with some of the important problems connected with the administration and supervision of the public schools and is designed to meet the needs of persons interested in the Provisional Certificate in Administration and Supervision. Among the topics treated are the need for public school administration and supervision, the place and function of school administration and supervision in the public school system, the school board, administrative and supervisory officials, business management of schools, the school plant, public relations, the curriculum, personnel problems, pupil accounting, financial problems, the testing program, the health program, the school library, the improvement of teaching, and other problems related to the administration and supervision of public schools.

Education 461. (Formerly Education 45.) High School Administration and Supervision. **Three hours.**

Scope and function of administration; administration of the program of studies; the vocational program; the health program; the extracurriculum; the guidance program; the program for individual differences; schedule of classes; personnel and organization; buildings and grounds; equipment and supplies; office standards; procedures and forms; the school and the community.

Education 463. (Formerly Education 46.) Supervised Student Teaching. **Eight or ten hours.**

Prerequisites: One semester in residence at Eastern; standing of "C".

Observation, participation, and responsible room teaching; child study with special case study problems and remedial work; development of skills and techniques desirable for good school procedure, the location, collection, and organization of materials for instruction; study of community occupations, resources, social and economic problems; experience in meeting parents, visiting homes, participation in social programs of school and community; experience in directing various kinds of activities including routine school duties, field trips, and extracurricular program; acquaintance with the school organization, school policies, system of records and the like; learning how to maintain desirable pupil-teacher relationship.

Education 464. (Formerly Education 44.) Principles of Secondary Education. **Three hours.**

Growth and background of the American secondary school; variability and selection of the pupil; aims and functions of secondary education; relation to elementary and higher education; forms of organization; comparison between European and American secondary schools; the rural school; vocational education; trends and methods of curriculum construction; the secondary school offerings; extracurricular activities; guidance and community relationship; vision of secondary education.

Education 466. (Formerly Home Economics 46.) Advanced Methods in Home Economics. **Three hours.**

Prerequisite: Education 304 or taken concurrently.

The student has an opportunity to prepare teaching materials, visit high schools and lunchrooms, keep records, work with Future Homemakers of America, and plan assembly programs.

Education 490. Moral-Spiritual Values in Education. **Three hours.**

The purpose of this course is to provide opportunities for teachers to focus their attention on certain moral and spiritual values within the framework of the existing curriculums.

GRADUATE DIVISION COURSES

Education 501. (Formerly Education 50a.) School Admiinistration I. **Two hours.**

Federal relations to education; the state as a fundamental school unit; general school law and court decisions relating to public education; powers and duties of state school officials; work of the state department of education; local units of school control; power and duties of local school officials; administration of adult education and other types of special education; the administration of teacher personnel; public-school relations; closer school-community relationships —for what?; principles of good school-community relationships; education and the community; non-government controls of education; school insurance administration; the non-public or protest school; community administrative structure; principles of operation.

Education 502. (Formerly Education 50b.) School Administration II. **Two hours.**

Administration of pupil accounting; the school census; attendance; records and reports; organization and administration of the supervisory program; curriculum administration; selection of school sites; building plans and designs; school building management; operation and maintenance of the school plant; selection and use of equipment and supplies; organization of school ilbraries; auxiliary agencies; administration of health education; school consolidation and transportation; office administration; classification and progress of pupils; administration of pupil guidance; appraisal; interpretation; advanced education; major steps in building a school.

Education 503. (Formerly Education 50c.) School Administration III. **Two hours.**

The background of school finance; the school finance situation; the control of public education; tests of wholesomeness of fiscal policy; economic effects of school finance; cost and character of education; a conceptual basis for local financial administration; budgeting school funds; auditing school accounts; school revenue-sources and management; financial accounting; cost analysis; financial statements and reports; salaries of school employees; school supply management; management of school property; financing capital outlay; the American state and central support of public education; the foundation program; designing programs for marshaling effective support for an adequate foundation program-equalization; designing programs for marshaling effective support for vigorous local autonomy; progress and compromise; designing fiscal programs to establish the desired balance of controls between central and local agencies; measures of educational need for use in state programs; measures of relative ability for use in evaluating fiscal policy and in designing state programs; state educational endowment; the state and taxation; federal financing of education.

Education 504a. Problems in Educational Administration. **One hour.**

This course is designed for advanced graduate students who desire to work on special problems according to their individual needs. Students enrolling for this course should have the approval of the Head of the Department of Education and the Dean of the College.

Education 504b. Problems in Educational Administration. **One hour.**

A continuation of Education 504a.

Education 504c. Problems in Educational Administration. **One hour.**

A continuation of Education 504b.

Education 505. Kentucky School Law. **Two hours.**

This course will be primarily concerned with developing knowledge and understanding of: the principles of school law, constitutional provisions relating to public schools in Kentucky, school districts, school buildings and other school property, school officers, the State Department of Education, school support, con-

duct of schools, compulsory attendance, school faculties and other employees, retirement, tenure, vocational education, rehabilitation education, higher education, and court interpretation of the laws.

Education 510. (Formerly Education 51a and 51c.) Curriculum Problems and the Improvement of Instruction in Elementary Schools. **Three hours.**

Meaning and function of education; underlying principles developed for curriculum use and curriculum revision; interpretation of the learning experiences (school subjects in light of the meaning and function of education); study of concrete materials and classroom procedure with a representative range of practical problems in various subject areas; types of organization used in modern instruction; how children learn; various educational agencies in the community; how the school may be made a real community center; laboratory study and field trips.

Education 511. General Supervision. **Three hours.**

Objectives and problems of school supervision; techniques and functions of supervision; current practices in supervision; problems of organizing instruction to meet increasing responsibiilties of public schools; analyzing teachers' difficulties; planning supervisory programs; selecting and organizing instructional materials; locating and using community resources and other aids available to public school teachers; techniques for developing desirable professional relations; problems of in-service education for teachers. Each member of the group will plan a supervisory program for a local school system in Kentucky as a special project in the course.

Education 512. Curriculum Development. **Two hours.**

This course is designed for graduate students who desire to make a critical study of the principles and techniques of curriculum making in public schools. Recent curriculum developments are evaluated and effective curriculum programs are considered. Some attention is given to the recent professional literature on curriculum development and trends.

Education 515. (Formerly Education 52.) Human Development and the Psychology of Learning. **Three hours.**

Developmental factors and individual differences; motives, goals, and purposes; arranging the learning situation; problem solving and creative expressions; acquiring skill and information; transfer; the curriculum; social setting for learning; evaluation of development and learning.

Education 516. Measurement and Guidance. **Three hours.**

An intensive study of measurement and other techniques for guidance and counseling in schools. Elementary statistical methods are included. Recent developments are evaluated and effective programs are given special attention.

Education 519. Clinical Study of Exceptional Children. **Three hours.**

Methods are studied for diagnosing and teaching brilliant, retarded, physically handicapped, and emotionally maladjusted children.

Education 521. (Formerly Education 53.) Audio-visual Education. **Three hours.**

Meaning and value of audio-visual aids; fundamental principles developed for the selection, organization, and utilization of audio-visual materials; detailed study of various sources of visual aids; formation of standards for evaluation; laboratory study and field trips. Special attention is given to problems of organizing these materials in a school.

Education 522. (Formerly Education 54.) Personality Development and Adjustment. **Three hours.**

Foundations of personality; human development and personality; the home and personality; the school and personality; the social order and personality; frustration and aggression; conflicts and other maladjustments; the analysis of

personality; improving personality; educational implications of the psychology of personality; a case history illustrating the foregoing topics.

Education 531. (Formerly Education 55a.) History of Education. **Two hours.**

Brief survey of the history of education in ancient and medieval times with special reference to the contribution of Greece, Rome, and Christianity to modern education; educational influences of the Renaissance and the Protestant Reformation; the role of the doctrine of formal discipline; educational influence of Comenius, Rousseau, Pestalozzi, Froebel, and Herbart.

Education 532. (Formerly Education 55b.) History of Education in the United States. **Two hours.**

Rise and development of public education in the United States with special emphasis upon the work of Horace Mann; sociological, psychological, and scientific movements in education; desirable educational reorganizations; the influence of John Dewey; brief study of the development of public education in Kentucky.

Education 536. (Formerly Education 55c.) Philosophy of Education. **Two hours.**

Meaning and scope of philosophy and education; contrasting philosophies and conceptions of education; the nature and meaning of education in relation to the individual and the social order; education and democracy; social progress and social control; the nature of thinking; educational aims and values; subject matter and methodology in relation to the educative process; character education; evaluation and interpretation of present-day issues and problems in education.

Education 537. (Formerly Education 55d.) Comparative Education. **Two hours.**

Examination, comparison, and discussion of the background of conditions and theories which have resulted in the present practices in education in the world today with special emphasis upon the school systems and practices in Germany, France, England, Russia, Denmark, Sweden, China, Australia, Canada, Mexico, and representative South American countries. Comparisons will be made between education in America and in foreign countries.

Education 542. (Formerly Education 56.) Applied Statistical Methods. **Two hours.**

Prerequisite: Education 368.

Measurements in psychology and education; frequency distributions; measures of central tendency; measures of variability; applications of the normal distribution curve; reliability and significance of statistics; testing hypothesis; prediction and errors of prediction; correlation methods; reliability and validity of tests.

Education 543. Investigations in Rural Education. **Two hours.**

This course is designed to familiarize the student with the important problems in the field of rural education. Among the subjects considered are the problems of attendance, improvement of instruction, techniques of teaching, school consolidation and pupil transportation, school reorganization, libraries, playground activities, lunchrooms, community organizations, and the community school.

Education 550. (Formerly Education 57 and 57r.) Educational Sociology. **Three hours.**

Relation of sociology to education; sociological problems and their educational implications; social groups and institutions in relation to education; social forces and their significance in society; the sociological determination of educational objectives; social elements and values in the curriculum; democracy in school administration and supervision; essential elements of a socialized educational program.

Education 551. (Formerly Education 57b.) Problems in Vocational Education. **Two hours.**

Meaning and need of vocational education; basic principles formulated for the study of vocations and the application of these principles to intelligent selection of a vocation; comprehensive study of the factors determining an intelligent

vocational choice including job analysis and analysis of human and economic resources. Emphasis is placed on how vocational education may function in the small as well as the large school system.

Education 561. (Formerly Education 58a). High School Administration. **Two hours.**

Secondary school organization; the principal; the staff; the pupils; program of studies; schedules; community relationships; records and reports; articulation; library; plant; finance; other high school problems.

Education 562. The Role of the Principal. **Three hours.**

Nature of demands made on school principals; organization of duties for effective management; planning the year's work; responsibilities for schedule-making; guidance functions of the principal; projecting a guidance organization; office duties of the principal; duties pertaining to records and reports; organizing the program of student activities; administering the program of student activities; duties pertaining to the need of youth; adjusting school to pupil needs; evaluating the progress of pupils; the administration of teacher personnel; duties pertaining to supervision; educational diagnosis and remedial treatment; the improvement of curriculum materials; the use of tests in instruction; the school library; business duties of principals; administering the school plant; the principal in the community; and the future of the school principalship.

Education 563. (Formerly Education 58b and 58c.) Improvement of Instruction in the Secondary School. **Three hours.**

Aims of the public secondary schools; plans for evaluating curriculum procedures; qualities of good teaching; procedures of evaluating and improving classroom teaching; methods of making the school a more effective agency.

Education 565. Investigations in Reading. **Two hours.**

This course is designed for graduate students who desire to make a critical study of the investigative and theoretical literatures dealing with the teaching of reading in the elementary school.

Education 566. Investigations in Mathematics. **Two hours.**

This course is designed for graduate students who desire to make a critical study of the investigative and theoretical literatures dealing with the teaching of mathematics in the elementary school.

Education 567. Investigations in Social Studies. **Two hours.**

This course is designed for graduate students who desire to make a critical study of the investigative and theoretical literatures dealing with the teaching social studies in the elementary school.

Education 569. (Formerly Education 59d.) Research in Education. **Two hours.**

Functions of educational research; types of research and the principal techniques of each type; bibliography; discovering educational problems for study; organization and interpretation of data; preparing and evaluating research reports; class discussions and reading reports.

Required of all graduate students who do not prepare a thesis.

Education 570. Seminar. **One hour.**

Education 571. Seminar. **One hour.**

Education 572. Seminar. **One hour.**

The Seminar is designed for students who are preparing a thesis in partial fulfillment of the requirements for the degree of Master of Arts in Education. If the thesis requirement is waived, Education 569, Research in Education, is required.

ENGLISH

(Recommended curriculum for a major in English with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
Physical Education 110	½	English 131 or 231*	3
Science 109 or 111	3	Physical Education 110	½
Social Science 100	3	Psychology 211	3
Sociology 100	1	Science 110 or 112	3
Electives	6	Social Science 101	3
		Sociology 101	1
	16½		16½

Second Year

Education 215	3	Education 216	3
English 211	3	English 212	3
English 265	2	Foreign Language	3
Foreign Language	3	History 247	3
History 246	3	Physical Education 110	½
Physical Education 110	½	Electives	4
Elective	2		
	16½		16½

Third Year

Education 384	3	English 302	2
English 301	2	English Elective	3
English Elective	3	Foreign Language	3
Foreign Language	3	Health or Physical Education Elective	1
Health 201	3	History 340, 341, or 342	3
Elective	2	Electives	4
	16		16

Fourth Year

Education 364	6	English 441	3
Education 463	10	English Elective	2
		Electives	11
	16		16

English majors should select for their English electives one course in group 4 and at least one course each from the remaining groups and enough other courses to make a total of 26 hours in addition to English 101 and 102:

1. English 201, 202, 205, 216, 319, 325, 327
2. English 262, 263, 311, 312
3. English 314, 317, 318, 321, 322
4. English 421, 423, 424, 425

* If English 231 is elected, it should be postponed until the Sophomore year.

A student may take an area in English by earning a total of at least 48 semester hours, excluding English 101 and 102. In general, the student may follow the curriculum for a first major in English, adding at least 22 additional hours and selecting them in such a way that the 48 hours will be distributed as follows: 30 semester hours in Grammar, Composition, and Literature; and 18 semester hours distributed among Speech, Dramatics, and Journalism. Any additional hours above the 48 minimum should be taken in the field of Literature.

A student with a first major in some other department may take the following courses for a second major in English: English 101, 102, 131 or 231, 211, 212, 301, 302, 441; and one course each from any three of the following groups to make a minimum of 24 hours exclusive of English 101 and 102:

1. English 216, 201 or 202, 205, 262 or 263, 319, 325, 327
2. English 311, 312, 314, 317
3. English 318, 321, 322
4. English 421, 423, 424, 425

Students with second majors in English are urged to meet the requirements in foreign languages for the first major if it is possible to do so.

A student with a major and a minor in other departments may take the following courses for a minor in English:

I. Literature—English 101, 102, 211, 212, 301, and one course each from the following groups to make a minimum of 18 hours exclusive of English 101 and 102:

1. English 131, 201, 202, 231, 265, 302
2. English 216, 311, 312, 314
3. English 317, 318, 321, 322
4. English 421, 423, 424, 425

II. Speech and Dramatics—English 101, 102, 131, 211, 212, 231, 262 or 263, 264 or 431, 205 or 331, 311 or 312.

The student who wishes to major in English without right of certification to teach may follow the curriculum for the first major given above, but substitute other courses for those in education.

ENGLISH

LOWER DIVISION COURSES

English 101. (Formerly English 10a, 10b.) Spoken and Written Communication I. **Three hours.**

Study or review of the mechanics of expression, such as grammar, punctuation, spelling, and sentence structure; word study and good usage, including the use of the dictionary; practice in letter writing and in organizing and presenting both in writing and speaking (especially in brief compositions and expository speeches) material from the student's experience and observation and from his reading and study; some practice in more effective reading and listening.

English 102. (Formerly English 10b, 10c.) Spoken and Written Communication II. **Three hours.**

Prerequisite: English 101.

Continued practice in organizing and presenting material as written and spoken composition. Longer compositions; at least one longish investigative paper which employs the elementary principles of research; paragraph structure and development; emphasis on reading and analysis; acceptable usage in speaking and writing.

English 131. (Formerly English 163, 12.) Fundamentals of Speech. **Three hours.**

Prerequisite: English 101.

Corrective work for posture and movement; applied science of voice production; characteristics of a pleasing voice; individual diagnosis of voice qualities; tone-placing; enunciation; pronunciation; pitch, rate, and volume; much practice in individual speaking and reading under careful, constructive criticism.

English 201. (Formerly English 20a.) Journalism I. **Two hours.**

Prerequisite: English 101 and 102.

Survey of newspaper content; nature of news; special forms of news; news gathering; news writing; features and human interest stories; mechanics of news printing; news ethics; the school newspaper. (Note: Students taking this course are expected to work on the college newspaper and to attend and "cover" assembly or chapel programs.)

English 202. (Formerly English 20b.) Journalism II. **Two hours.**

Prerequisite: English 101 and 102.

The newspaper as an organ of public opinion and an instrument of the general welfare; newspaper history; newspaper policies and trends; freedom and responsibility of the press; purposes and types of editorials; editorial technique; reading and analysis of editorials; editorial writing; press and radio; the informative newspaper and magazine article.

English 205. (Formerly English 31 and 305.) Discussion and Debate. **Three hours.**

Prerequisites: English 101 and 102.

Logic and semantics; process and persuasion in the formation of public opinion; application of discussion and debate as essential tools for reaching decisions in a democratic society.

English 211. (Formerly English 218, 21t.) Survey of Literature I. **Three hours.**

Prerequisites: English 101 and 102.

Selections from the great masterpieces of Greek and Latin poetry, drama, history, and philosophy; selections from Oriental, Hebrew, and Mohammedan literature; selections from medieval myth, saga, and romance; selections from the continental literature of the Renaissance; selections from modern French, German, and Russian literature; individual reading of some complete masterpieces.

English 212. (Formerly English 219, 21c.) Survey of Literature II. **Three hours.**

Prerequisites: English 101 and 102.

Anglo-Saxon poetry; romances of chivalry; ballads; Chaucer; Shakespeare and Elizabeththan drama; Renaissance English lyrics; Milton; prose from Bacon to Pepys; prose of the New Classicism; poetry of the New Classicism; the Romantic poets; English prose of the nineteenth century; American essays and addresses; Victorian poets; nineteenth century American poets; the short story; the new English drama.

English 216. (Formerly English 22.) The Short Story. **Two hours.**

Prerequisites: English 101 and 102 and one course in literature.

Technique of the short story; development of the short story as a literary type; romanticism and realism in stories; the short story in America; short stories for the high school; the writing of a story or of a paper.

English 231. (Formerly English 23.) Public Speaking. **Three hours.**
Prerequisites: English 101 and 102.
Source and organization of speech materials; objective and audience considerations; practice in preparation and delivery of speeches for various occasions, purposes and audiences; speech criticism; parliamentary procedure with participation drills.

English 262. (Formerly English 27a.) Dramatic Presentation I—Acting. **Two hours.**
Prerequisites: English 101 and 102 or permission of instructor.
Laboratory course designed for individual interested in performance as well as for individual interested in teaching this art. Equal emphasis given to "think-the-thought" and "mechanical" schools of dramatic art.

English 263. (Formerly English 27b.) Dramatic Presentation II—Play Direction. **Three hours.**
Prerequisites: English 101 and 102.
All aspects of play direction discussed—play selection, tryouts, rehearsals, staging, theory, terminology, etc. Each individual develops a theory of play direction. Final examination involves direction of a one-act play.

English 364. (Formerly English 25 and 264.) Story Telling. **Three hours.**
Prerequisites: English 101, 102 and 360.
History of story telling; purpose and aim of story telling; story interests of childhood; preparing the story; telling the story; dramatizing the story; uses of the story in schoolroom subjects; study of a considerable stock of stories of a wide range of appeal; much practice in actual telling of stories to children; constructive analysis of each student's performance.

English 265. (Formerly English 26.) Grammar for Teachers. **Two hours.**
Prerequisites: English 101 and 102.
Parts of speech, syntax and sentence analysis; history of teaching of grammar; methods of testing and measuring progress.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

English 301. (Formerly English 30a.) Advanced Composition I. **Two hours.**
Required of juniors and seniors who have less than six hours of freshman English.
Required written reports, precis, recommendations; informational essays or feature articles, news stories, editorials; book reviews; critical essays; research articles. Students are encouraged to write with a view to submitting their articles to suitable periodicals for publication.

English 302. (Formerly English 30b.) Advanced Composition II. **Two hours.**
Prerequisite: English 301.
Practice in writing short stories, one-act dramas, radio and motion picture dramas, feature articles, critical essays, familiar essays. Students are encouraged to write with a view to submitting the writing to suitable agencies for publication.

English 311. (Formerly English 32a and 32b.) Shakespeare. **Three hours.**
Prerequisites: English 101 and 102, and two courses in literature.
Elizabethan England as a background for the Shakespearian drama; early Elizabethan drama; Elizabethan theories of comedy and tragedy; development of Shakespeare's dramatic genius; problems of authorship, chronology and texts; the great comedies, histories, and tragedies; rapid reading of many plays and more careful study of a few of the great plays.

English 312. (Formerly English 33.) Modern Drama. **Three hours.**
Prerequisites: English 101 and 102, and two courses in literature.

Ibsen and his influence; the free theater and the new drama on the continent; naturalism and expressionism; the independent theater and the dramatic revival in England; the Abbey Theater and the Irish Renaissance; American imitators of the European drama; the little theater movement; Eugene O'Neill and the repertory theater; experimental drama.

English 314. (Formerly English 34a and 34b.) The Novel. **Three hours.**

Prerequisites: English 101 and 102, and two courses in literature.

History, development, and survey of the English novel and the American novel from their beginnings to 1920; content and literary characteristics of the different types of novels; foreign influences; extensive reading and discussion of the different types of novels.

English 317. (Formerly English 35a and 35b.) Contemporary Literature. **Three hours.**

Prerequisites: English 101 and 102, and two courses in literature.

Creative writing of the last ten years and its roots in the immediate past; new influences, new names, new trends in fiction; consideration of the literature of escape, of self-revelation, and of social consciousness; new poets and poetic theories and techniques exemplified in current poetry; new dramatists and current dramatic theories and techniques; radio, motion picture, and stage drama; evaluation of book reviews and commercial organizations designed to influence book selection; extensive rather than intensive reading (not confined to any one nation).

English 318. (Formerly English 36.) Literature of the United States. **Three hours.**

Prerequisites: English 101 and 102, and two courses in literature.

Persistence of pioneer attitude in American literature; the case for religious, political, personal, and economic freedom; from rugged individualism toward social concern; "woods longing" and the open road; quest for the ideal; interracial accommodation and conflict; progress toward realism; men and nature; men and machines; men and earth; literary evaluation; teaching techniques; writers as human beings; topics inherent in selected individual writings from colonial times to the present.

English 319. (Formerly English 461 and 40.) Kentucky Literature. **Two hours.**

Prerequisites: English 101 and 102, and two courses in literature.

The economic, political, social, and religious background of the early Kentuckians as expressed in their writings; ante bellum literature; the influence of the War Between the States; the rise of local color fiction; the revival of poetry; present-day writers and tendencies; ballads; seventeenth century survivals in the native idiom; opportunity for students to become familiar with the John Wilson Townsend Collection.

English 321. (Formerly English 37a.) Poetry and Prose of the Romantic Period. **Three hours.**

Prerequisites: English 101 and 102, and two courses in literature.

In poetry the rise, development, and culmiation of Romanticism; the impact of German metaphysics; the development of poetic form in Wordsworth and Coleridge; the return to the past in Scott and Southey; revolt and satire in Byron; Shelley and democratic idealism; Keats and esthetics. In prose the development of the essay as a medium of self-expression, literary criticism, and social ideals, as exemplified in the writings of Lamb, Coleridge, Hazlitt, De Quincy, and Landor.

English 322. (Formerly English 37b.) Poetry and Prose of the Victorian Period. **Three hours.**

Prerequisites: English 101 and 102, and two courses in literature.

Social ideals, political principles, religious conceptions, scientific theories, and cultural changes as mirrored in the non-fictional prose of such Victorian writers as Macaulay, Carlyle, Newman, Mill, Spencer, Arnold, Huxley, Ruskin,

Stevenson, and Pater. The poetic cycle from Tennyson to Housman, reflecting the religious faith and doubt, social reform and unrest, estheticism, and skepticism of the period.

English 325. Literature of the Old Testament. **Three hours.**

Prerequisites: English 101 and 102, and two courses in literature.

The reading of selected writings of the Old Testament for literary appreciation; the types of Old Testament literature—historical narratives, prophetic poetry, religious lyrics, secular lyrics, dramatic poetry, wisdom literature, short stories; social and moral ideals revealed; the reading aloud of great passages.

English 327. (Formerly English 39.) Books and the Modern Mind. **Two hours.**

Prerequisites: English 101 and 102, and two courses in literature.

Reading and discussion of modern books that have influenced modern thought and action; basic concepts of the physical universe, man, and society as found in such writers as Darwin, Marx, Frazer, and others; social applications in novels and plays; influence upon forms of literature and art; attempts at ethical and religious synthesis.

English 331. (Formerly English 38a and 38b.) Speech Correction. **Three hours.**

Prerequisites: English 101, 102, and 131 or 231.

Diagnostic and remedial procedures for functional disorders; the phonatory and articulatory aspects of speech development; analysis of physical and mental tests; corrective material and technique; foreign language influence; the case record.

English 360. (Formerly English 24 and 260.) Literature for Children. **Three hours.**

Prerequisites: English 101 and 102.

Brief survey of the history of children's literature and a study of the literature itself under the following topics: Mother Goose, fairy tales, folklore and fables, realistic and fanciful stories, myths, epics and sagas, the romance cycles, poetry, fiction, biography, historical and geographical literature. Methods of teaching literature in the elementary grades are touched upon.

English 402. Creative Writing. **Three hours.**

A seminar course in writing open to those students who have had English 302 or who have a desire to have their manuscripts criticised before being submitted for publication. Fiction, drama, poetry, biography, or the informal essay accepted.

English 421. (Formerly English 42.) Renaissance and Elizabethan Literature. **Three hours.**

Prerequisites: English 101 and 102, and two courses in literature.

Spirit of the Renaissance; influence of Italian and other continental literatures; early English humanists; Elizabethan enthusiasm; the Elizabethan language; new literary influences; chief literary forms; Spenser and Elizabethan poetry; the great sonneteers; Sidney and criticism; Bacon and scientific writing; the Shakespearian poetry; Ben Johnson, Drayton, and Daniel; prose fiction; Elizabethan drama.

English 423. (Formerly English 43.) Milton and the Puritan Period. **Two hours.**

Prerequisites: English 101 and 102, and two courses in literature.

The Puritan background; life of Milton as it affected his writings; his earlier poetry; development of his genius; the great epic Paradise Lost and its interpretation; Paradise Regained and Samson Agonistes; other writers of the period and their writings.

English 424. (Formerly English 44.) Chaucer and Medieval Story. **Two hours.**

Prerequisites: English 101 and 102, and two courses in literature.

Study of the various types of medieval story—the folk-epic, the beast tale, the metrical romance, the fabliau, the saint's legend, and the ballad—and of the social and moral ideals which they reveal.

English 425. (Formerly English 45.) The Age of Classicism. **Three hours.**
Prerequisites: English 101 and 102, and two courses in literature.
Social backgrounds of classicism; Restoration drama as a reaction against Puritanism; Dryden and the rise of the critical spirit; French and Graeco-Roman influences; the literary dictatorship of Dr. Johnson; the decay of literary patronage; new tendencies in Thomson, Cowper, Gray, Chatterton, Goldsmith, and Crabbe.

English 431. (Formerly English 435 and 46.) Interpretative Reading. **Three hours.**
Prerequisite: English 131 or its equivalent.
Sources of materials; techniques of interpretation; criteria for selecting readings, for preparing contestants and readers, and for judging contests; individual work under careful direction.

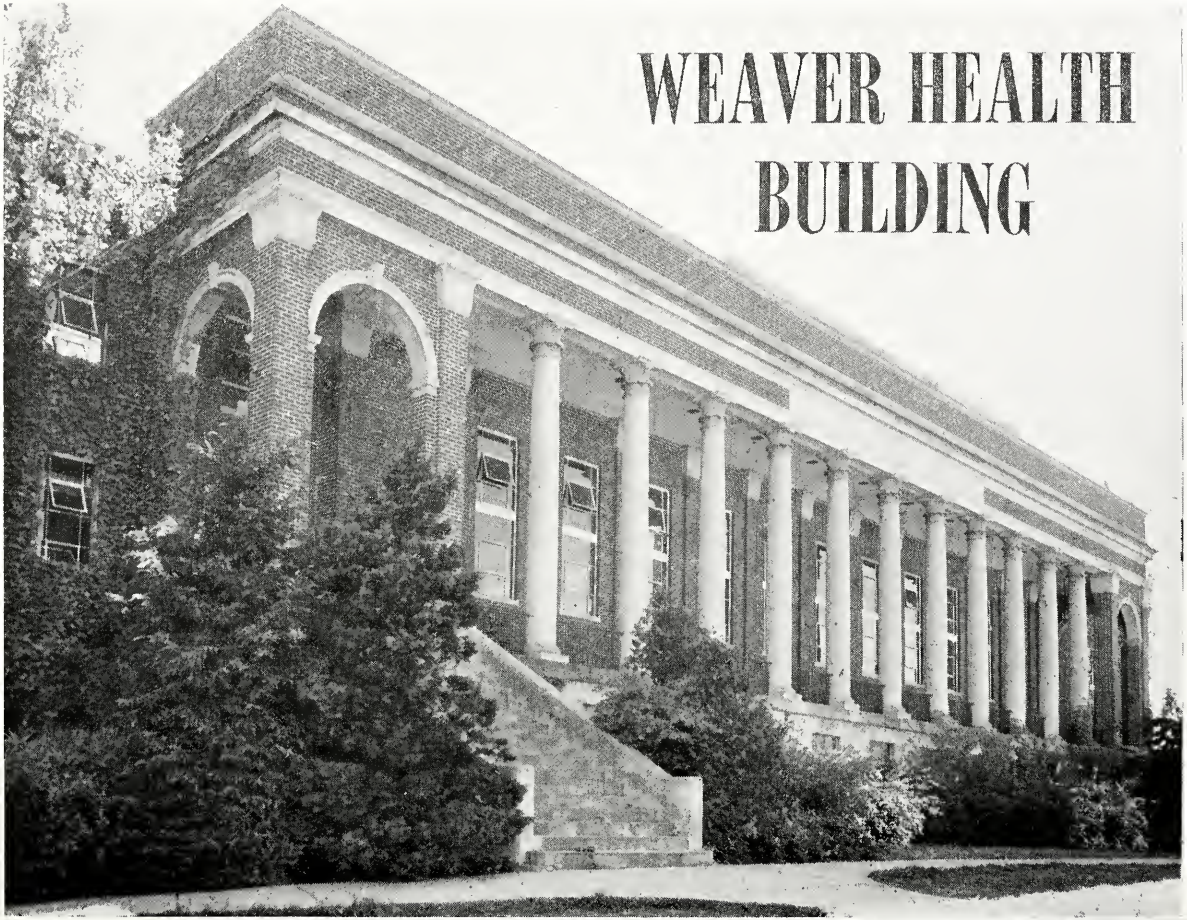
English 441. (Formerly English 47.) History of the English Language. **Three hours.**
Prerequisite: Two years of work in English toward a major or minor in English.
The family of languages; the Old English period; the Middle English period; modern English; the foreign and native elements in English; history of English vowel sounds; mutation and gradation; the consonants; English inflections; English accent; collateral readings in the less technical works on the English language.

GRADUATE DIVISION COURSES

English 511. The Development of English Drama to 1642. **Three hours.**
Medieval liturgical drama; early miracle plays and the guild cycles; morality plays and interludes; early Tudor Renaissance drama; the development of the theater; companies of actors; Marlowe, Lyly, Greene, Peale, and Nashe; Edward De Vere and the Shakespearian drama; Ben Johnson and the Stuart dramatists.

English 515. (Formerly English 52.) English Criticism. **Three hours.**
A study of the development of English criticism from its beginnings to the end of the nineteenth century. Foreign influences in English criticism; changing conceptions of the criteria of criticism; the great critics and their works.

English 565. (Formerly English 50 and 51.) Problems in High School English. **Three hours.**
A seminar for graduate students who wish to work on individual problems under the direction of an instructor.


WEAVER HEALTH
BUILDING

FOREIGN LANGUAGES

A student may take an area in Foreign Languages by earning a total of at least 48 semester hours in three different languages. The 48 hours shall be distributed as follows: 18 semester hours in the leading language, 12 semester hours each in two other languages, and 6 semester hours elective. The 6 hours of electives should be in one of the languages selected for the area of concentration.

FRENCH

A student may major in French by taking a minimum of **24** hours in French.

A student with a major and a minor in other departments may take a minimum of **18** semester hours for a minor in French.

LOWER DIVISION COURSES

French 101. (Formerly French 11.) Elementary French. **Three hours.**
Pronunciation; grammar; conversation in French on material studied.

French 102. (Formerly French 12.) Elementary French. **Three hours.**
Prerequisite: French 101 or one unit of high school French.
Continuation of grammar study begun in French 101 and oral work based on reading material.

French 201. (Formerly French 21.) Intermediate French. **Three hours.**
Prerequisites: French 101 and 102 or two units of high school French.
Grammar review; short history of French literature; notable examples of the French short story.

French 202. (Formerly French 22.) Intermediate French. **Three hours.**
Prerequisite: French 201 or three units of high school French.
Grammar review; three French novels.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

French 301. (Formerly French 31.) French Prose Classics. **Three hours.**
Prerequisite: Two years of college French or the equivalent.
Intensive reading of a number of French prose classics with emphasis on the language structure; extensive reading of works by representative prose writers from the Middle Ages to the nineteenth century.

French 302. (Formerly French 32.) French Prose Classics. **Three hours.**
Prerequisite: French 301 or its equivalent.
Selected prose works of the nineteenth and twentieth centuries.

French 401. (Formerly French 41.) French Poetry. **Three hours.**
Prerequisites: Two years of college French or the equivalent.
The Medieval Period; the Renaissance; the Golden Age; Romanticism; the Parnassus School; Symbolism; contemporary tendencies in poetry.

French 402. (Formerly French 42.) French Drama. **Three hours.**
Prerequisite: French 401 or its equivalent.
The classical period; the eighteenth century; Romanticism; modern drama.

French 403. (Formerly French 350.) French Seminar. **Three hours.**
Prerequisite: Twelve hours of college French.
This course is designed to round out as much as possible the major work in French, giving a view of the subject as a whole, supplementing at points which have of necessity been neglected and discussing problems for study in the future as the student goes into the teaching field or the graduate school. Review of the great schools of prose, drama, and poetry; wide readings in contemporary literature; conversation in the salon manner on problems of interest to the language student.

French 404. Advanced French Grammar and Composition. **Three hours.**
Prerequisite: Twelve hours of college French.
The aim of this course is to review the techniques of French composition, and to encourage independent writing on the part of the student. Review of phonetics and grammar; compositions on assigned subjects in French literature.

GEOGRAPHY

(Recommended curriculum for a major in Geography with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
Geography 101	3	Geography 102	3
Physical Education 110	½	Physical Education 110	½
Science 109 or 111	3	Psychology 211	3
Sociology 100	1	Science 110 or 112	3
Elective	6	Sociology 101	1
		Elective	3
	16½		16½

Second Year

Education 215	3	Education 216	3
English 211	3	English 212	3
Geography 271	3	Geography 202	3
History 246	3	Geography 221	3
Physical Education 110	½	History 247	3
Elective	4	Physical Education 110	½
		Elective	2
	16½		17½

Third Year

Geography 372	3	Education 384	3
Geography 330	2	Geography 373	3
Geology 301	3	Geography 471	3
Health 201	3	Geography 473	3
Elective	5	Health or Physical Education Elective	1
		Elective	3
	16		16

Fourth Year

Geography 305 or 474	2	Education 364	6
Geography 475 or 477	3	Education 463	10
Elective	11		
	16		16

Recommended Curriculum for a Minor in Geography

A student with a major and a minor in other departments may take the following courses for a minor in Geography: Geography 101, 221, 271, 372, 373, 471, and Geology 301.

GEOGRAPHY

(Recommended curriculum for a major in Geography without right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
Geography 101	3	Geography 102	3
Physical Education 110	½	Physical Education 110	½
Science 109 or 111	3	Science 110 or 112	3
Sociology 100	1	Sociology 101	1
Elective	6	Elective	6
	16½		16½

Second Year

English 211	3	English 212	3
Geography 271	3	Geography 202	3
History 246	3	Geography 221	3
Physical Education 110	½	History 247	3
Elective	7	Physical Education 110	½
		Elective	4
	16½		16½

Third Year

Geography 372	3	Geography 373	3
Geography 330	2	Geography 471	3
Geology 301	3	Geography 473	3
Humanities	3	Elective	7
Elective	5		
	16		16

Fourth Year

Geography 305 or 474	2	Elective	16
Geography 475 or 477	3		
Elective	11		
	16		16

GEOGRAPHY

LOWER DIVISION COURSES

Geography 101. (Formerly Geography 10.) Principles of Geography: Elements and Factors. **Three hours. Fee .75.**

The field of modern geography; earth as a member of the solar system; earth's form and movements; geographical elements; elements of weather; climates of earth; the biotic factors; the physiographic factors; edaphic and pedalogic factors, the mineral factors; the hydrographic factors; the spatial factors; the social factors; the geographic unit; geographic tools; a brief history of the changing aspects of geography.

Geography 102. Principles of Geography: Regions and Societies of the World. **Three hours.**

Prerequisite: Geography 101.

The nature of regional geography; regions of the continents; geographic patterns of mankind; population problems; man and his environment; human development of races, religious, governments, cultures, industries, institutions, occupations and activities; geography of cities; urban and rural groups; problems of today and tomorrow.

Geography 202. (Formerly Geography 20.) Climatology. **Three hours.**

Weather and weather observation; elements of climate; climate regions of the world—a study of climate as affected by the physical factors of sun, mountains, land and water; changes in temperature, pressure, winds—direction and force; humidity; cloud phenomena, precipitation, and the major types of storms; forecasting; the climatic regions of the world; weather conditions and their relation to human activities.

Geography 221. (Formerly Geography 21.) Economic Geography of the Industries. **Three hours.**

The more important agricultural products—cereals, starch foods, forage crops, vegetable crops, fruit crops, wine industries, sugar, vegetable oils, condiments and tobacco, vegetable fibers, non-food vegetables; the animal food stuffs, animal fibers, furs, skins; the mining industries; manufacturers—aluminum, automobile, copper, chemical textile, leather, iron and steel, paint, petroleum, rubber, etc.; trade routes, inland in North America and international trade routes; world trade centers.

Geography 271. (Formerly Geography 22.) Geography of Anglo-America. **Three hours.**

Prerequisite: Geography 101 or 102.

This course is a detailed study of the United States, Canada, and Alaska; structure and physiography; climate; the geographic regions of these three countries, such as the Spring Wheat Region, the Coasts of Newfoundland and Labrador, the North Pacific Coast and Mountains, the Yukon Valley, the Cotton Belt, the Lower Region, Central California, etc.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Geography 300. (Formerly Geography 30.) Geography of the South. **Two hours.**

Prerequisite: Geography 101 or 102.

The South, yesterday and today; the advancing South; the physical landscape; the cultural landscape; the major regions; the people of the South; the races and their distribution and problems; transportation facilities; agri-

culture, its development, its regions, its problems, and possibilties; power resources; mineral wealth, forest resources; manufacturing and industries; comparison of rural and urban communities of the South; the South's future.

Geography 305. (Formerly Geography 31.) Economic and Historical Geology. **Two hours.**

The origin of the earth; genesis of ore deposits; evolution of plants and animals; origin of mountains; history and growth of continents; the earth's interior; formation and recognition of common rocks and minerals; architecture of the earth; geologic time table; the geologic eras; the growth of knowledge of the earth; man's place in nature; geology in the service of man applied to industry and to the larger affairs of men; economic and geologic features of minerals.

Geography 330. (Formerly Geography 23 and 230.) World Democracy and Geopolitics. **Two hours.**

Geopolitics; the ideological conflict; backgrounds of nationalism; the global war and strategy; social factors; economic factors; political factors; physical factors; religion and war; educational impacts; cultural factors; health and physical fitness: land and ocean warfare; military factors; diplomacy and war; after war, what?

Geography 372. (Formerly Geography 32.) Geography of Europe. **Three hours.**

Prerequisite: Geography 101 or 102.

The general geographic setting of Europe as a whole; the physiography, climate, economic and political geography of each of the major countries; European trade and commerce; the geographic advantages and handicaps of the various European countries that have resulted from the changes in boundaries that followed the World Wars.

Geography 373. (Formerly Geography 33.) Geography of Latin America. **Three hours.**

Prerequisite: Geography 101 or 102.

International importance of Latin America; growing interest of the United States in Latin America; historical geography of discovery, settlement and development; Caribbean resources; the Panama Canal; South America in world trade; population distribution; transportation facilities; climatic and physiographic regions; economic geography of the Pampas, the Amazon Basin, Central Mexican Plateau; the Llanos, Andean Highlands.

Geography 471. (Formerly Geography 40.) Geography of World Problems. **Three hours.**

Prerequisite: Six hours of geography.

Geography and the evolution of nations; the expansion of Europe; European influence in world affairs; economic resources; the British Empire and its many problems—India, Egypt, Ireland, South Africa; geography and problems of major nations of the Orient; Islamism; Russia, past and present; Europe in Africa; the problems of the Far East.

Geography 473. (Formerly Geography 41.) Geography of Asia. **Three hours.**

Prerequisite: Geography 101 or 102.

The structure of Asia; the physiography of Asia; the climates of Asia; the vegetation of Asia; the population of Asia; the exploration and exploitation of Asiatic countries by European nations; Asia's position in the world; the agricultural resources of Asia; summary of the economic resources of Asia; Turkey; Arab Asia; the Iranian Plateau; India, Burma; Ceylon; Southeastern Asia; the East Indies; China; Japan; Asiatic Russia; growing interest in the United States in Asia; the geographic advantages and disadvantages of the continent.

Geography 474. (Formerly Geography 42.) Geography and Geology of Kentucky. **Two hours.**

The Kentucky country; geology, surface and drainage; weather and climate; native vegetation; native animals; native people; the coming of the white man; the soil and its conservation; agriculture; animal industries; mineral resources; manufacturing; transportation; location and growth of cities; Louisville and the cities of the Ohio Basin; other cities; the counties of Kentucky; cultural features of Kentucky—government, education; Kentucky of the Future.

Geography 475. (Formerly Geography 43.) Geography of Africa. **Three hours.**

Prerequisite: Geography 101 or 102.

Structure; physiography; climate; vegetation; population; exploration; exploitation; position in world affairs; agricultural resources; transportation facilities; climatic and physiographic regions; foreign trade and foreign interests; comparisons and contrasts with other continents; the geographic advantages and disadvantages; changes resulting from the World Wars and post-war conditions; present-day problems and their geographic background.

Geography 476. Australia and Oceania. **Three hours.**

Prerequisite: Geography 101 or 102.

Physiography, climates, populations, economic and industrial activities, political relationships and problems, native and European cultures of the Pacific World. The locational factors of this area in peace and war.

Geography 477. (Formerly Geography 44.) Conservation of Natural Resources. **Three hours.**

History of the conservation movement; the forest resources; soil depletion and restoration; the land resources; the fertilizer resources; water origin and supply; water power; irrigation and reclamation; navigation; the mineral resources; the mineral fuels, coal, petroleum, natural gas; the metalic resources, iron, copper, lead, gold, zinc, aluminum, silver, uranium and radium; the human resources; agricultural losses.

GRADUATE DIVISION COURSES

Geography 500. Historical Geography. **Three hours.**

Prerequisite: 12 hours of Social Science or 6 hours of Geography.

The geography of the world and the United States in the past. The relations between earth's conditions and resources on the one hand, and the historical development of nations on the other; the adjustments of nations and peoples to varied environments; the evolution of the environmental relationships of the people in selected areas of the world; evolutionary geography.

Geography 501. Geography in Education. **Three hours.**

Prerequisite: 12 hours of Social Science or 6 hours of Geography.

A survey of geography in the present day school systems of the world from the elementary school to the university; examination and comparison of courses of study, objectives, outlines, offerings and problems; evaluation of departments, geographic literature, equipment, books, magazines, and other materials; the place of geography in the service of the nations.

GEOLOGY

Geology 301. (Formerly Geology 20 and 201.) Physical Geography and Geology. **Three hours. Fee, $1.00.**

Materials of the earth; weathering; work of wind; work of ground water; work of streams; work of glaciers; the ocean and its work; the structure of the earth; earthquakes; volcanoes and igneous intrusions; metamorphism; mountains and plateaus; ore deposits; soils, their classification and origin; major physiographic features, their origin and influence on man.

UNIVERSITY BUILDING

GERMAN

LOWER DIVISION COURSES

German 101. (Formerly German 11.) Elementary German. **Three hours.**
Pronunciation; Grammar; conversation in German on material studied.

German 102. (Formerly German 12.) Elementary German. **Three hours.**
Prerequisite: German 101 or one unit of high school German.
Continuation of grammar study began in German 101 and oral work based on reading material.

German 201. (Formerly German 21.) Intermediate German. **Three hours.**
Prerequisites; German 101 and 102 or two units of high school German.
Grammar review; short history of German literature; notable examples of the German short story.

German 202. (Formerly German 22.) Intermediate German. **Three hours.**
Prerequisite: German 201 or three units of high school German.
Grammar review; three German novels.

GOVERNMENT

LOWER DIVISION COURSES

Government 211. (Formerly Government 10 and 111.) American Government. **Three hours.**

National government; organization of the various departments with their functions and operations, political parties, ideals of correct government, relation of federal to state and local government.

Government 212. (Formerly Government 11 and 112.) American Government. **Three hours.**

State and local government; organization, operation, and problems of state, county and municipal government; relation of state and local to national government.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Government 351. (Formerly Government 30.) English Government. **Two hours.**

Prerequisite: Government 111.

The rise of governmental institutions of England and her influence among the nations; kingship; parliament; cabinet; ministry; privy council; Swiss system of government and her democracy.

Government 411. (Formerly Government 40.) International Diplomacy. **Three hours.**

Prerequisite: Government 111.

Leading negotiations and treaties among the nations; diplomatic and consular affairs in general.

Government 452. (Formerly Government 41.) Foreign Government. **Three hours.**

Prerequisite: Government 111.

Main features of the governments of Germany, France, Italy, and Russia.

Government 453. (Formerly Government 42.) Principles of Democracy. **Two hours.**

The theory of democracy; history of democracy; the attack on democracy; defense of democracy; leading democratic documents; democracy in the present crisis.

GRADUATE DIVISION COURSES

Government 555. (Formerly Government 55.) Political Theory. **Three hours.** Political Theory as propounded in Plato, Aristotle, Machiavelli, Grotius, Hobbes, Locke, Bodin, Bossuet, Voltaire, Montesquieu, Diderot, Turgot, Rousseau.

Government 556. (Formerly Government 56.) Political Theory. **Two hours.** Political Theory since Rousseau, as propounded by Wilson, Laski and others.

HEALTH AND PHYSICAL EDUCATION

(Recommended curriculum for a major in Health and Physical Education with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
Health 100	2	Physical Education 110	½
Physical Education 110	½	Physical Education 126	2
Science 111	3	Psychology 211	3
Social Science 100	3	Science 112	3
Sociology 100	1	Social Science 101	3
Elective	4	Sociology 101	1
		Elective	2
	16½		17½

Second Year

Biology 225	3	Biology 229	3
Education 215	3	Education 216	3
English 211	3	English 212	3
Health 202	1	Health 201	3
History 246	3	History 247	3
Physical Education 110	½	Physical Education 110	½
Physical Education 220	2	Physical Education 252 (Women)	2
Physical Education 250 (Men) or Physical Education 251 (Women)	2		
	17½		17½

Third Year

Health 365	2	Education 384	3
Physical Education 225 (Women)	2	Health 362	2
Physical Education 361 (Women)	2	Health 366	2
Physical Education 367 (Men)	1	Physical Education 300	2
Physical Education 420 (Men) (If have not had 261 or 360 or (362)	2	Physical Education 261 or 360 or 362 if have not had 420 (Men)	2
Elective	7 or 9	Physical Education 366	2
		Elective	3
	16		16

Fourth Year

Health 475	2	Education 364	6
Physical Education 401	2	Education 463	10
Physical Education 468	2		
Elective	10		
	16		16

Students taking a major in Health and Physical Education should take a major in another department. It is not recommended that one majoring in Health and Physical Education be permitted to take two minors.

Recommended Curriculum for a Major in Health Education

A student may take a major in Health Education with a minor in Physical Education and a minor in some other field. The following courses are required for the major in Health: Health 100, 201, 202, 303, 362, 365, 366, 475, 480; Home Economics 231, 307; Chemistry 111, 112.

Recommended Curriculum for a Minor in Health Education

A student with a major and a minor in other departments may take the following courses for a minor in Health Education: Health 100, 201, 202, 365, 366, 475, 480; Home Economics 231, 307.

HEALTH

LOWER DIVISION COURSES

Health 100. (Formerly Health 10.) Personal Hygiene. **Two hours.**
Correct living habits; desirable health practices; the place of health in modern times; scientific versus unscientific and irrational health practices.

Health 201. (Formerly Health 26.) Public Hygiene and Safety. **Three hours.**
Public hygiene and disease prevention; home, school, and community sanitation and public health; safety in home, school, and community.

Health 202. (Formerly Health 20.) First Aid to the Sick or Injured. **One hour.** Fee, $3.25.
Meetings emergencies in the schoolroom, on the playground, on the athletic field, and in everyday life. The Standard and Advanced Red Cross Certificates are awarded to students completing the course.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Health 303. (Formerly Health 21.) General Bacteriology. **Four hours.** Fee, $1.50.
Prerequisites: Chemistry 111 and 112, and junior standing.
Stains and staining techniques; sterilization; prepartion of culture media; isolation and identification of bacteria; bacterial control; physical and chemical agents; immunity; disease control.

Health 362. (Formerly Health 32.) Correctives. **Two hours.**
Prerequisite: Biology 225. Fee, $2.50.
Basic, fundamental facts and principles upon which to build a sound program of corrective or reconstructive health and physical education. Exercises developed and used in this course will be based on anatomical and physiological principles, performed by the individual alone or with assistance, for the prevention or arrest, the cure or correction, of some definite functional or organic disability or deformity.

Health 365. Health Education in the Elementary Schools. **Two hours.**
Deals largely with methods and materials in the elementary schools. Various methods, procedures, and techniques are presented, discussed, and evaluated in its relation to their use in developing the school health instruction program.

Health 366. (Formerly Health 365.) Health Education in the Secondary Schools. **Two hours.**
Modern method, materials, and resources for effective teaching of health in the junior and senior high schools. Emphasis is placed on the development of units for a basic course in health as well as the integration with other subjects.

Health 475. Tests and Measurements in Health and Physical Education. **Two hours.**
The students become familiar with the various tests and measurements in this field. They learn how to give and score the tests, evaluate and use the results obtained in the testing program.

Health 480. Field Work in Community Health. **Two hours.**
The purpose of this course is to familiarize the students with the various agencies that are essential to the development of a community health education program. They will do field work with the various health organizations in the community.

HISTORY

(Recommended curriculum for a major in History with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
Physical Education 110	½	Physical Education 110	½
Science 111	3	Psychology 211	3
Social Science 100	3	Science 112	3
Sociology 100	1	Social Science 101	3
Elective	6	Sociology 101	1
		Elective	3
	16½		16½

Second Year

Education 215	3	Education 216	3
English 211	3	English 212	3
History 202	3	History 203	3
History 246	3	History 247	3
Modern Language	3	Modern Language	3
Physical Education 110	½	Physical Education 110	½
Elective	1	Elective	1
	16½		16½

Third Year

Education 384	3	Health or Physical Education Elective	1
Health 201	3	History 344	3
History 340	3	History 499	3
History 498	3	Elective	9
Elective	4		
	16		16

Fourth Year

History 448	3	Education 364	6
Elective	13	Education 463	10
	16		16

Recommended Curriculum for a Second Major in History

A student with a first major in some other department may take the following courses for a second major in History: History 202, 203, 246, 247, 340, 344, 498, and 499.

Recommended Curriculum for a Minor in History

A student with a major and a minor in other departments may take the following courses for a minor in History: History 202, 203, 246, 247, 498, and 499.

HISTORY

(Recommended curriculum for a major in History without right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
Physical Education 110	½	Physical Education 110	½
Science 111	3	Science 112	3
Social Science 100	3	Social Science 101	3
Sociology 100	1	Sociology 101	1
Elective	6	Elective	5
	16½		15½

Second Year

English 211	3	English 212	3
History 202	3	History 203	3
History 246	3	History 247	3
Modern Language	3	Modern Language	3
Physical Education 110	½	Physical Education 110	½
Elective	4	Elective	4
	16½		16½

Third Year

Health 201	3	Health or Physical Education Elective	1
History 340	3	History 344	3
History 448	3	Elective	12
Elective	7		
	16		16

Fourth Year

History 498	3	History 499	3
Elective	13	Elective	13
	16		16

HISTORY

LOWER DIVISION COURSES

History 202. (Formerly History 21.) American History 1492 to 1865. **Three hours.**

Discovery, exploration and conquest by nations; colonization; the colonial wars; alienation of the colonies from England and eventual revolution; establishment of government and rise of a powerful nation; the War of 1812; the new nationalism; westward movement; Jacksonian democracy; the slavery controversy; Civil war and reconstruction.

History 203. (Formerly History 22.) American History 1865 to the present. **Three hours.**

The rise of industrialism; problems of the American farmer; social and cultural advance; money and the tariff; the last American frontier; America as a world power; the World Wars; politics since 1876; recent social developments.

History 205. (Formerly History 25.) Local History Appreciation. **Two hours.**

Prerequisite: One course in American History.

Local history, its significance in state and naitonal development; local records, county, city, school, church, business, family; county and other local histories; biographies and genealogies; diaries, journals, letters, etc.; local leaders; sources for writing local history; local historical surveys; excursions to historic buildings, ruins, museums, cemeteries.

History 209. (Formerly History 29.) A Survey of the Global War. **Two hours.**

Social, economic, and political background of World War II; problems brought about by world conflict; the importance of a lasting peace.

History 246. (Formerly History 141.) History of Western Civilization. **Three hours.**

The beginnings of man; geographic and other factors contributing to the emergence of pre-industrial culture; patterns of pre-industrial culture in the Near East, the Mediterranean Basin, and Medieval Europe.

History 247. (Formerly History 142.) History of Western Civilization. **Three hours.**

(1) Emergence of the mature pre-industrial culture pattern with emphasis on the factors that are common to Western Civilization from medieval times to the Industrial Revolution; (2) the culture pattern of the industrial era with similar emphasis but with progressively more attention to its world-wide developments and with progressively more illustrative material drawn from the United States.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

History 340. (Formerly History 30 and 241.) European History from 1300 to 1815. **Three hours.**

Renaissance; Reformation; rise of the national state and royal absolutism; decline of manorialism; rise of capitalism and the mercantile system; the British revolutions of the seventeenth century; international rivalries; the age of reason and enlightened despotism; the French Revolution and Napoleon.

History 341. (Formerly History 35.) English History to the Stuarts. **Three hours.**

The coming of the Anglo-Saxon; advance toward nationality; the Norman invasion; English feudalism; the Hundred Years' War; legal and political development; the Wars of the Roses and the fall of feudalism and rise of Tudor monarchy; the Divine Right of James I and Charles I; religious and financial struggles of the time; parliamentary resistance to the first two Stuarts; the "Roundhead Rebellion"; Charles II; James II and the English Revolution.

History 342. (Formerly 37.) English History from 1714 to the Present. **Three hours.**

Prerequisite: History 341.

The Hanoverian dynasty; the struggle for empire; development of British imperialism; parliamentary reforms of the nineteenth century; influence of political parties; England's place in the "Parliament of Men."

History 344. (Formerly History 31.) European History from 1815 to 1918. **Three hours.**

Intellectual and religious developments; restoration and reaction following the Congress of Vienna; revolutionary and reform movements; nationalism; imperialism; political, social, and economic developments in the major countries.

History 347. (Formerly History 40.) Recent and Current World History, 1918 to the Present. **Two hours.**

The First World War and its consequences; the League of Nations and the International Court of Justice; causes of the Second World War; present conditions.

History 349. (Formerly History 34.) Survey of the Far East. **Three hours.**

This course centers mainly about China and Japan, with the European Nations and America brought in when their policies lead into the area. Some attention is given also to India, Australia and to islands tof the Pacific.

History 404. The Ante-Bellum Period (1815-1860). **Three hours.**

Rise of nationalism; political sectionalism; Jacksonian Democracy; "Manifest Destiny" or the ruse of the Pacific; the rise of secession and the conditions that led to the Civil War.

History 405. (Formerly History 44.) History of the American West. **Three hours.**

Prerequisites: History 202 and 203.

Significance of the West in American History; advancement of the frontier; influence of the West on politics; Indian problems; the West of the fur trader, the rancher, the miner, and the farmer; communication and transportation; the end of the frontier.

History 406. (Formerly History 45a and 45b.) History of the American South. **Three hours.**

Settlement; peoples; religions; government; education; social and economic conditions; relations with the North and with foreign nations consequent to slavery; the Civil War; Reconstruction, resumption, and progress in all lines.

History 407. (Formerly History 47.) Recent and Current American History. **Two hours.**

The on rush of "Big Business"; commerce; expansion; tariff; foreign relations; imperialism; World Wars and current politics.

History 443. (Formerly History 42.) The French Revolution and Napoleon. **Two hours.**

Prerequisites: History 340 and 344.

A survey of the Old Regime with emphasis on the causes of the Revolution; the Revolution and the Napoleonic Empire.

History 446. (Formerly History 48.) Latin American History. **Three hours.**

A survey of the history of the nations to the south of us, covering the period from Columbus to the present; Latin American culture, economics, politics, and world interest, with special emphasis on our relations with these countries.

History 448. (Formerly History 55a and 448a.) Topics in History and Social Science. **Three hours.**

(Required of and open only to students majoring in history or social science.)

Prerequisites: History 202, 203, 246, 247, 340, and 344.

This course is designed to introduce students to the elements of research in social science and history and to develop facility of expression in writing. Selection of topics for study will be made on the basis of the previous training and special interests of the students participating. Topics may be selected in American or European history or in economics, government, or sociology.

History 449. (Formerly History 49.) History as a Social Science. **Two hours.**

The scientific approach to social problems and their historical interpretation; an analysis of the economic, social, intellectual, and political backgrounds of contemporary civilization.

History 461. (Formerly History 46.) Kentucky History. **Three hours.**

General, social, economic, and political history of Kentucky; her influence in the development of American democracy; her periods of leadership in the nation; her educational system; Kentucky's great men and women; historical sources of Kentucky.

History 498. The Ideological Foundations of Western Civilzation. **Three hours.**

(Required of all undergraduate and graduate students majoring or minoring in history or social science.)

Prerequisites: History 202, 203, 246, and 247.

Introduction to the basic concepts in the ideological heritage of the Western World from the end of the medieval age through the Enlightenment. Reading materials will consist largely of selections from the great books and documents in religion, science, economics, political theory, and philosophy.

History 499. The Ideological Foundations of Western Civilization. **Three hours.**

(Required of all undergraduate and graduate students majoring or minoring in history or social science.)

Prerequisites: Same as for History 498.

Introduction to the basic concepts in the ideological heritage of the Western World from the Enlightenment to the present. Reading materials will consist largely of selections from the great books and documents in religion, science, economics, political theory, and philosophy.

GRADUATE DIVISION COURSES

History 501. (Formerly History 51 and 551.) American Colonial History, 1492-1776. **Three hours.**

This course is designed to show the foundations of American institutions, political, social, and economic.

History 502. The Federal Period, 1776-1815. **Three hours.**

The American Revolution and its results; rise of the Confederation Movement; Constitutional Convention; the Federal organization of the new government; Jeffersonian Democracy; the War of 1812 and its results.

History 503. (Formerly History 52 and 552.) The American Civil War and Reconstruction. **Three hours.**

To review the political and military administrations of the United States and the Confederate States during the war, and to show the political, social, and economic effects on the United States as a whole.

HOME ECONOMICS

(Suggested for an Area in the Field of Home Economics. Deviation from this curriculum may be permitted to take care of individual differences.)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	Art 117	3
Home Economics 203	3	English 102	3
Home Economics 231	3	Home Economics 204	3
Physical Education 110	½	Physical Education 110	½
Science 111	3	Science 112	3
Social Science 100	3	Social Science 101	3
Sociology 100	1	Sociology 101	1
	16½		16½

Second Year

Chemistry 111	5	Chemistry 112b	5
Education 215	3	Education 216	3
English 211	3	English 212	3
Home Economics 206	3	Home Economics 215	3
Home Economics 208	3	Music 271	3
Physical Education 110	½	Physical Education 110	½
	17½		17½

Third Year

Art Elective or Industrial Arts Elective	2	Education 305	3
Education 304	3	Home Economics 222	3
Health 303	4	Home Economics 305	3
Home Economics 301	3	Home Economics 306	3
Home Economics 302	3	Home Economics 330	3
Restricted Elective (Approval of Head of Department)	2	Restricted Elective (Approval of Head of Department)	2
	17		17

Fourth Year

Home Economics 250	3	Education 364	4
Home Economics 307	3	Education 463	10
Home Economics 402	3	Education 466	3
Home Economics 403	5		
Elective	3		
	17		17

Recommended Curriculum for a Minor in Home Economics

A student with a major and a minor in other departments may take the following courses for a minor in Home Economics: Foods, 6 hours; Clothing, 6 hours; House, 3 hours; Family and Child Development, 3 hours.

Classification of Home Economics Courses

For certification purposes Home Economics courses are classified as follows:

Foods and Nutrition: 204, 215, 302, 306.

Clothing and Textiles: 101, 155, 203, 206, 305, 308, 455.

Health and Home Care of Sick: 231.

Family Relationships and Child Care: 208, 307, 402.

HOME ECONOMICS

LOWER DIVISION COURSES

Home Economics 101. (Formerly Home Economics 10.) Textiles. **Two hours.**
Physical and chemical characteristics of the various textile fibers; the weaves, finishes, durability and care of fabrics; application of scientific information to the purchase and use of fabrics.

Home Economics 155. (Formerly Home Economics 12.) Costume Design. **Two hours.**
Principles of design as related to the costume; study of line, color, and texture in fabrics as related to different types of individuals.

Home Economics 203. (Formerly Home Economics 20.) Garment Making. **Three hours.**
Clothing selection, fabric, planning and construction. A study of factors that influence the selection of a college wardrobe. Fundamental construction techniques, use of commercial patterns, fitting and alterations. Lecture one hour and laboratory work.

Home Economics 204. (Formerly Home Economics 21a.) Family Meals—Planning, Selection, Preparation and Serving. **Three hours.**
Composition of foods; the nutritive value of foods; diet in relation to health; the fundamental principles involved in planning, preparing, and serving three meals a day. Fee, $2.25.

Home Economics 206. (Formerly Home Economics 23.) Dressmaking. **Three hours.**
Prerequisite: Home Economics 203 or its equivalent.
Selection, construction and consumer education. Advanced problems in the selection, planning, construction techniques and problems effecting the consumer in relation to clothing. Lecture one hour and laboratory work.

Home Economics 208. Personal Relationships in the Home and Community. **Three hours.**
The development of and the responsibility of the family members to the family and the community. Learn about the community and how a person fits into a community.

Home Economics 215. (Formerly Home Economics 21b.) Family Meals, Planning, Selection and Preparation. **Three hours.**
Prerequisite: Home Economics 204.
Planning, preparing, and serving three meals a day. Table service, etiquette, hospitality, and special entertainments emphasized. Fee, $7.50.

Home Economics 222. (Formerly Home Economics 24.) Interior Decoration. **Three hours.**
Prerequisite: Art 117.
Decoration and furnishing for the interior of the house. Laboratory work in refinishing of furniture, slip covers and drapes.

Home Economics 231. (Formerly Health 22 and 231.) Home Nursing. **Three hours.**
First aid and care of sickness in the home.

Home Economics 250. (Formerly Home Economics 25.) The House. **Three hours.**
Architecture; house plans; landscaping; materials suitable for building a home; financing a home.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Home Economics 301. (Formerly Home Economics 30.) Household Equipment. **Three hours.**

Standards for judging household equipment; advantages of labor-saving devices; care of equipment.

Home Economics 302. (Formerly Home Economics 31.) Advanced Cookery. **Three hours.**

Prerequisite: Home Economics 215.

Reasons for results in food products; skills and techniques of cookery; quantity cookery.

College cafeteria used as a laboratory. Fee, $4.50.

Home Economics 305. (Formerly Home Economics 34.) Tailoring and Design. **Three hours.**

A study of design in clothing and tailoring. Construction techniques in tailoring a suit or coat. Lecture one hour and laboratory work. This course planned for teacher education. The students prepare teaching materials for use in clothing classes.

Home Economics 306. (Formerly Home Economics 35.) Advanced Nutrition. **Three hours.**

Prerequisites: Chemistry 112b and Science 111 and 112.

Food nutrients and functions in the body. Construction of an adequate diet for persons under varying economic and social conditions.

Home Economics 307. The Family in the Home and the Community. **Three hours.**

Problems relative to marriage. Factors which contribute toward developing a well adjusted family; relation of the family in the community.

Home Economics 308. (Formerly Home Economics 37.) Advanced Textiles. **Two hours.**

Prerequisite: Home Economics 101.

The advanced study of textile fibers; chemical tests.

Home Economics 310. Nutrition for the Elementary Teacher. **Two hours.**

The fundamentals of nutrition. The importance of good nutrition to the child. Ways to interest the child in good nutrition. Results of good nutrition.

Home Economics 330. (Formerly Home Economics 33.) The Family as a Consumer. **Three hours.**

Prerequisites: Home Economics 204 and 215.

An appreciation of the factors which influence home and family living; a study of management problems relating to: time, energy, money, equipment, as well as personal development in relationships and hospitality.

Home Economics 401. (Formerly Home Economics 40.) Dietetics. **Three hours.**

Prerequisites: Home Economics 204, 215, 306, Chemistry 112b, Science 111 and 112.

Nutritive value of common foods; essentials of adequate diet; human nutrition applied to feeding individuals in health and disease.

Home Economics 402. (Formerly Home Economics 41.) Child Development. **Three hours.**

Prerequisite: Education 215-216.

Care necessary for physical, mental, emotional, and social development of the child from infancy through adolescence; observation of children.

Home Economics 403. (Formerly Home Economics 43.) Home Management. **Five hours.**

Prerequisite: Home Economics 306 and 330.

Improvement of skills in the management of time, money, and energy; meal planning; food buying; preparation and serving of meals; cleaning; laundrying. Family relationships, etiquette, and hospitality are emphasized.

Reservations for appointment to live in the Home Management House should be made several weeks prior to the beginning of the semester.

Home Economics 455. (Formerly Home Economics 42.) Advanced Costume and Design. **Three hours.**

Prerequisites: Home Economics 155 and Art 117.

The application of art principles in color and line, in designing and construction of garments.

Home Economics 456a. Special Problems in Home Economics. **One hour.**

The student chooses a problem and works under the supervision of the instructor in the field of the problem.

Home Economics 456b. Special Problems in Home Economics. **One hour.**

A continuation of Home Economics 456a.

Home Economics 456c. Special Problems in Home Economics. **One hour.**

A continuation of Home Economics 456b.

INDUSTRIAL ARTS

(Recommended curriculum for a major in the area of Industrial Arts with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
Industrial Arts 100	3	Industrial Arts 141	3
Industrial Arts 191	3	Industrial Arts 180	3
Physical Education 110	½	Physical Education 110	½
Science 109	3	Science 110	3
Social Science 100	3	Social Science 101	3
Sociology 100	1	Sociology 101	1
	16½		16½

Second Year

Art 117	3	Education 215	3
English 211	3	English 212	3
Industrial Arts 292	3	History 246	3
Industrial Arts 242	3	Industrial Arts 233	2
Industrials Arts 271 or Mathematics 107	3	Industrial Arts 382	3
Physical Education 110	½	Physical Education 110	½
		Elective	2
	15½		16½

Third Year

Health 201	3	Education 384	3
Education 216	3	Art 202	3
Health 202	1	Industrial Arts 466	3
Industrial Arts 351	3	Industrial Arts 343	3
Industrial Arts 361	3	Industrial Arts Elective	3
Physics 131 or Chemistry 111	5	Elective	2
	18		17

Fourth Year

Art Elective	3	Education 364	6
Industrial Arts 394	3	Education 463	10
Industrial Arts 487	3		
Industrial Arts Elective	5		
Elective	2		
	16		16

Industrial Arts courses to be elected to complete a total of 50 semester hours not including Industrial Arts 271. Military Science may be substituted for certain above courses with the approval of the major advisor. Mathematics 113 should be elected to follow Mathematics 107.

Recommended Curriculum for a First Major in Industrial Arts:

A student may take the following courses for a first major in Industrial Arts and other departmental courses for a second major or minors and to meet general requirements for a teaching certificate:

Industrial Arts 100, 191, 141, 180, 233, 242, 292, 383, 361, 466, and 351. Elect four hours.

INDUSTRIAL ARTS

(Recommended curriculum in the area of Industrial Arts without right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
Industrial Arts 100	3	Industrial Arts 141	3
Industrial Arts 191	3	Industrial Arts 180	3
Physical Education 110	½	Physical Education 110	½
Science 109	3	Science 110	3
Social Science 100	3	Social Science 101	3
Sociology 100	1	Sociology 101	1
	16½		16½

Second Year

Art 117	3	Art 217	2
English 211	3	Commerce 119	3
Industrial Arts 271 or Mathematics 107	3	English 212	3
Industrial Arts 242	3	Health 201	3
Industrial Arts 292	3	Industrial Arts 233	2
Physical Education 110	½	Industrial Arts 382	3
	15½	Physical Education 110	½
			16½

Third Year

Art 202	3	Commerce 230	3
Health 202	1	Commerce 341	3
Industrial Arts 392	3	Industrial Arts Elective	6
Industrial Arts 351	3	Science Elective	5
Physics 131 or Chemistry 111	5		
Elective	2		
	17		17

Fourth Year

English 205 or 131	3	Industrial Arts Elective	8
Industrial Arts 361	3	Elective	7
Industrial Arts 444 or 489 or 335	2		
Industrial Arts Elective	4		
Elective	4		
	16		15

A minimum of 54 semester hours is to be completed in Industrial Arts. At least 20 hours should be in the general area of specialization which may be represented by the metal, wood, or drawing areas in the Industrial Arts Department. Industrial Arts 271 is not to be counted toward the minimum 54 hour total.

INDUSTRIAL ARTS

LOWER DIVISION COURSES

Industrial Arts 100. (Formerly Industrial Arts 10.) General Shop. **Three hours.**

Introductory course involving basic units in drawing, woodworking, sheet metal, art metal, ornamental iron, and electricity; projects and practical shop problems in each activity. Fee, $1.50.

Industrial Arts 141. (Formerly Industrial Arts 11.) Elementary Cabinet Construction. **Three hours.**

Basic woodworking course including instruction in common hand tools, elementary wood turning, finishing, characteristics of common cabinet woods, and processing of lumber for industrial use. Fee, $1.50.

Industrial Arts 180. (Formerly Industrial Arts 26 and 280.) General Metal Work. **Three hours.**

Exploratory experiences in manipulative and informational units in bench metal, ornamental iron, sheet metal, art metal, machine tool processes, and elementary welding and foundry practice. Fee, $1.50.

Industrial Arts 191. (Formerly Industrial Arts 13.) Elementary Mechanical Drawing. **Three hours.**

A beginning course stressing lettering, orthographic projection, pictorial representation tracing, and blueprinting. Fee, $1.50.

Industrial Arts 233. (Formerly Industrial Arts 15.) Elementary Industrial Arts Design. **Two hours.**

Prerequisite: Industrial Arts 191.

Basic principles of design; application of design to products of industrial craftsmanship; period styles of furniture. Fee, $1.50.

Industrial Arts 242. (Formerly Industrial Arts 21.) Intermediate Cabinet Construction. **Three hours.**

Prerequisite: Industrial Arts 141.

Advanced hand woodworking units; opeartion of common woodworking machines; care and sharpening of tools; related information; construction and finishing of furniture projects. Fee, $1.50.

Industrial Arts 249. (Formerly Industrial Arts 14.) Wood Finishing and Decoration. **Two hours.**

Prerequisite: Industrial Arts 100 or 141.

Preparation of surface for finishing, staining, sealing, and filling; use of varnish, shellac, and lacquer; finishing abrasives and rubbing; refinishing of furniture. Fee, $1.50.

Industrial Arts 271. Industrial Mathematics. **Three hours.**

A course in general mathematics dealing with common and decimal fractions, percentage, ratio and proportion, graphs, strength of materials, work and power, geometrical construction, and the computation of weights of various industrial materials and objects.

Industrial Arts 282. (Formerly Industrial Arts 24b.) Foundry. **Two hours.**

Study of molding materials, tools, and equipment; molding operations; making and setting cores; metals; melting and pouring. Fee, $1.50.

Industrial Arts 283. (Formerly Industrial Arts 27.) Arc and Oxyacetylene welding. **Two hours.**

Manipulative processes and related information basic to successful welding techniques. Fee, $1.50.

Industrial Arts 292. (Formerly Industrial Arts 20.) Elementary Machine Drawing. **Three hours.**

Prerequisite: Industrial Arts 191.

The making of detail and assembly drawings; forms of bolts, nuts, thread, and conventions; problems from pictorial drawings with dimensions; tabular data; sketches from actual parts. Fee, $1.50.

Industrial Arts 293. (Formerly Industrial Arts 23.) Advanced Mechanical Drawing. **Three hours.**

Prerequisite: Industrial Arts 191.

Advanced mechanical drawing techniques with special emphasis placed on map drafting and sheet metal layout. Fee, $1.50.

Industrial Arts 294. (Formerly Industrial Arts 28.) House Planning. **Two hours.**

Planning a residence with floor plans, elevations, details, and specifications; orders of architecture; common styles of homes; building materials. Fee, $1.50.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Industrial Arts 303. (Formerly Industrial Arts 30.) Shop Planning and Equipment. **Two hours.**

Types of industrial school shops; shop planning; machine and tool specifications; design of shop furniture; selection of supplies.

Industrial Arts 322. (Formerly Industrial Arts 16 and 222). Crafts for Elementary Teachers. **Three hours.**

Appropriate crafts for the elementary school. Work in leather, woodburning, paper mache, plaster of paris, woodcarving, and plastics. Fee, $1.50.

Industrial Arts 323. (Formerly Industrial Arts 32.) Weaving and Upholstering. **Two hours.**

Prerequisite: Industrial Arts 100 or 141.

Upholstering plain surfaces and frame structures; upholstering with springs; renovation; caning; split and fiber weaving; materials; tools, and tool processes. Fee, $1.50.

Industrial Arts 326. (Formerly Industrial Arts 29.) Crafts I. **Three hours.**

A course designed to introduce the student to the various media of craft work. Emphasis placed on plastics and chip carving. Fee, $1.50.

Industrial Arts 328. Crafts II. **Three hours.**

An advanced course in crafts dealing with work in relief carving, jewelry making, wood inlay, and leather work. Fee, $1.50.

Industrial Arts 335. (Formerly Industrial Arts 22 and 235). Advanced Industrial Arts Design. **Two hours.**

Prerequisite: Industrial Arts 233.

Application of the fundamentals of design through production of plans, furniture rods, and designs representative of the various industrial arts activities. Fee, $1.50.

Industrial Arts 343. (Formerly Industrial Arts 31a.) Advanced Cabinet Construction I. **Three hours.**

Prerequisite: Industrial Arts 242.

Advanced projects involving skill in the use of machines and hand tools; additional practice in woodworking, reeding, fluting, carving, inlaying, veneering, dovetailing; study of industrial furniture processes. Fee, $1.50.

Industrial Arts 344. (Formerly Industrial Arts 33.) Wood Turning. **Three hours.**

Prerequisite: Industrial Arts 242.

Common wood turning problems; sharpening of tools; operations in spindle turning, faceplate turning, and chuck turning; finishing and polishing. Fee, $1.50.

Industrial Arts 345. (Formerly Industrial Arts 31b.) Advanced Cabinet Construction II. **Three hours.**

Continuation of Industrial Arts 343 with increased emphasis on craftsmanship and the development of a high degree of skill in furniture construction. Fee, $1.50.

Industrial Arts 346. (Formerly Industrial Arts 39 and 395.) Carpentry. **Six hours.**

Prerequisite: Industrial Arts 242.

Problems in small home construction; form building; framing; masonry; electrical wiring; interior finishing; painting; practice in actual construction.

Industrial Arts 351. Fundamentals of Applied Electricity. **Three hours.**

Application of static and current electricity; measures of electricity, magnetism, heat, light, and power, to the planning and construction of electrical installations, and the building of useful projects and appliances.

Industrial Arts 352. Electrical Power and Motor Repair. **Three hours.**

Generation and distribution of electricity; industrial power installations; maintenance and repair of electric motors.

Industrial Arts 361. (Formerly Industrial Arts 36.) Organization of Subject Matter in Industrial Arts. **Three hours.**

Organization of subject matter for teaching industrial arts in the junior and senior high schools; objectives of industrial arts; analysis of subject matter; organization of jobs; lesson plans; teaching devices.

Industrial Arts 382. (Formerly Industrial Arts 34.) Machine Shop Practice I. **Three hours.**

Prerequisite: Industrial Arts 180.

Projects made involving basic operations performed on lathe, drill press, shaper, bench grinder, power contour saws, and advanced bench work; blueprint reading and related shop mathematics. Fee, $1.50.

Industrial Arts 383. (Formerly Industrial Arts 35.) Art Metal Work. **Three hours.**

Prerequisite: Industrial Arts 180.

Artisan techniques of designing, laying out, raising, planishing, chasing, etching, spinning, soldering, engraving, and finishing products made of nonferrous metals. Fee, $1.50.

Industrial Arts 385. (Formerly Industrial Arts 25.) Sheet Metal Work. **Three hours.**

Prerequisite: Industrial Arts 180.

Care and use of the common sheet metal tools and machines; making of layouts; templates; projects involving soldering, seaming, punching, riveting, forming, and spot welding. Fee, $1.50.

Industrial Arts 392. Blueprint reading. **Three hours.**

Study and analysis of the various types of blueprints common to the woodworking, metalworking, electrical, and building trades. Fee, $1.50.

Industrial Arts 394. (Formerly Industrial Arts 37.) Elementary Architectural Drawing. **Three hours.**

Prerequisite: Industrial Arts 191.

Lettering; elements of architecture; mouldings; modeling; shades and shadows; wash work; rendering; elementary design. Fee, $1.50.

Industrial Arts 444. (Formerly Industrial Arts 41.) Machine Woodworking. **Two hours.**

Prerequisite: Industrial Arts 242.

Special machine operations; repairing and servicing of power woodworking machinery. **Fee, $1.50.**

Industrial Arts 464. (Formerly Industrial Arts 42.) History of Industrial Education. **Two hours.**

The history of industrial education from its early beginning to the present; the contribution of leaders and movements to the development of industrial arts and vocational education; legislation for vocational education and the State Plan.

Industrial Arts 466. (Formerly Industrial Arts 46.) Teaching of Industrial Arts. **Three hours.**

Problems of teaching industrial arts; methods of presentation; instructional aids; shop management; demonstration lessons; grading a student achievement.

Industrial Arts 467. Problems and Practices of the General Shop. **Three hours.**

A course dealing with the philosophy of the general shop; its physical organization, appropriate instructional materials, and the selection and construction of problems and projects.

Industrial Arts 487. (Formerly Industrial Arts 44.) Machine Shop Practice II. **Three hours.**

Prerequisite: Industrial Arts 382.

Continuation of Industrial Arts 382 with increased emphasis on machine tool operations; gear cutting, tool and cutter grinding; problems in tool making; source, characteristics, and use of the common metals. **Fee, $1.50.**

Industrial Arts 488. (Formerly Industrial Arts 45.) Machine Shop Practice III. **Three hours.**

Prerequisite: Industrial Arts 487.

Practice in advanced machine processes and tool making; heat treating of different metals; organization of project material; related information. **Fee, $1.50.**

Industrial Arts 489. Characteristics and Maintenance of Machine Tools. **Two hours.**

Prerequisite: 487.

A study of machine design and construction; installing, powering, servicing, and rebuilding machine tools. **Fee, $1.50.**

Industrial Arts 492. Advanced Machine Drawing. **Three hours.**

Machine drawing dealing with advanced detail drawing, advanced assembly drawing, patent drawing, and production illustrations. **Fee, $1.50.**

Industrial Arts 496. (Formerly Industrial Arts 47.) Advanced Architectural Drawing. **Three hours.**

Prerequisite: Industrial Arts 394.

Student, with instructor's approval, will select a major project and make suitable esquisse and rendu of same. **Fee, $1.50.**

GRADUATE DIVISION COURSES

Industrial Arts 561. Vocational Guidance. **Three hours.**

The major phases of guidance as an integral part of general education; techniques involved in assisting individuals to choose, prepare for, enter upon, and progress in their vocations.

Industrial Arts 562. Philosophy of the Practical Arts and Vocational Education. **Three hours.**

Background, purpose, and relationship of the practical arts and vocational education; relationship of both to total program of education; current philosophies of the practical arts and vocational education.

Industrial Arts 564. Special Problems in Industrial Arts. **One to Three hours.**

Problems of particular value to the teacher in the field, both of a practical and of a research nature will be pursued by the student and developed through conferences and activities directed by the staff.

LATIN

Major—A minimum of 24 semester hours to be selected.

Minor—A minimum of 18 semester hours to be selected.

LOWER DIVISION COURSES

Latin 101. (Formerly Latin 115 and 10.) Elementary Latin. **Three hours.**
Pronunciation; declension of nouns, adjectives, and pronouns; indicatives; infinitives; simple uses of subjunctive verbs; acquisition of the fundamental principles of the language; ability to read simple Latin prose dealing with Roman home life, mythology, and Roman history.

Latin 102. (Formerly Latin 116 and 11.) Elementary Latin. **Three hours.**
Prerequisite: One unit of high school Latin or Latin 101.
Caesar and a wide range of authors of equal difficulty; vocabulary, inflection, syntax, and their application to English; collateral reading on Roman history and society; training in the understanding of Latin in the Latin order.

Latin 201. (Formerly Latin 12.) Selections from Cicero and Ovid. **Three hours.**
Prerequisite: Two units of high school Latin or Latin 102.
Selections from the works of Cicero, Ovid, Pliny, and others; continued emphasis on mastery of vocabulary and syntax; emphasis on the relation ot Latin to English; comparison of the government of the Roman Republic to that of democracies of the present day.

Latin 202. (Formerly Latin 205 and 13.) Selection from Vergil's Aeneid. **Three hours.**
Prerequisite: Two or three units of high school Latin or Latin 201.
Selections from Aeneid of Vergil; study of the Augustan age; study of metrical form and structure of the poem; continued emphasis on Latin inflection and constructions.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Latin 301. (Formerly Latin 15.) Selections from Livy. **Three hours.**
Prerequisite: Three units of high school Latin or the equivalent.
Survey of Roman history from the foundation of Rome to the close of the second Punic War; assigned readings from such historians as Mommsen, Heitland, and others; comparative study of Rome and Carthage; critical study of Livy's style.

Latin 302. (Formerly Latin 16.) Selections from Horace. **Three hours.**
Prerequisite: Three units of high school Latin or the equivalent.
Selected odes, epodes, and satires from Horace; study of the Augustan age from both a literary and political point of view; study of Horace's philosophy; various meters employed by Horace.

Latin 303. (Formerly Latin 22.) The Writing of Latin Prose. **Three hours.**
Prerequisite: Latin 301 or the equivalent.
Selections from the text, "Arnold's Latin Prose"; review of syntax, sight reading.

Latin 304. (Formerly Latin 23.) The Latin Dramatists. **Three hours.**
Prerequisite: Latin 301 or the equivalent.
Dramas of Plautus, Terrence, and Seneca; two plays of Plautus for intensive study; rapid reading of other representative plays.

Latin 401. (Formerly Latin 41.) Latin Prose of the Silver Age. **Three hours.**
Prerequisite: Latin 302 or the equivalent.
Letters of Pliny the Younger; selections from the writings of Tactitus.

Latin 402. (Formerly Latin 32.) Satire and Epigram. **Three hours.**
Selected satires of Juvenal; selected epigrams of Martial; development of satire in Latin literature with assignments from Horace; satire in English; epigram as a literary expression.

Latin 403. (Formerly Latin 31.) Latin Literature of the Early Empire. **Three hours.**
Prerequisite: Latin 302 or the equivalent.
The Oxford University Press text—selections compiled by A. C. B. Brown. The selections form a connected and contemporaneous discussion of politics, education, literature, philosophy, social types, and town and country life.

Latin 404. (Formerly Latin 30.) Literature of the Late Republic. **Three hours.**
Prerequisite: Latin 302 or the equivalent.
Selections from the works of Caesar, Sallust, Nepos, and Cicero with emphasis on Ciceronian prose as a basis of much of the thinking and writing since his day; selections from works of poets of this age with emphasis on the works of Catullus and Lucretius.

Latin 405. (Formerly Latin 42.) Roman Private Life. **Three hours.**
Lectures, discussions, and readings on Roman family, home, marriage, education, clothing, food, amusements, travel, religion, town and country life.

LIBRARY SCIENCE

LOWER DIVISION COURSES

Library Science 166. (Formerly Library Science 10.) Library Orientation. **One hour.**

Discussion of the card catalog; library plans; principles of classification; mechanical make-up of the books; reference books; indexes; bibliographies; printed aids in book sections.

MATHEMATICS

(Recommended curriculum for a major in Mathematics with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
Mathematics 107	3	Mathematics 108	2
Physical Education 110	½	Mathematics 113	3
Social Science 100	3	Physical Education 110	½
Sociology 100	1	Social Science 101	3
Elective	5	Sociology 101	1
		Elective	5
	15½		17½

Second Year

Education 215	3	Education 216	3
English 211	3	English 212	3
Health or Physical Education Elective	1	Mathematics 251	5
Mathematics 232	3	Physical Education 110	½
Physical Education 110	½	Physics 202	5
Physics 201	5		
Elective	2		
	17½		16½

Third Year

Health 201	3	Education 384	3
Mathematics 352	3	Mathematics 467	3
Elective	10	*Mathematics Elective	3
		Elective	7
	16		16

Fourth Year

*Mathematics Elective	3	Education 364	6
Elective	13	Education 463	10
	16		16

Recommended Curriculum for a Second Major in Mathematics

A student with a first major in some other department may take the following courses for a second major in Mathematics: Mathematics 107, 108, 113, 232, 251, 352, and two courses from the following: Mathematics 321, 334, 453, 454, 455, 467.

Recommended Curriculum for a Minor in Mathematics

A student with a major and a minor in other departments may take the following courses for a minor in Mathematics: Mathematics 107, 108, 113, 232, 251, 352.

* Electives to be taken from Mathematics 321, 334, 407, 453, 454, 455 and 456.

MATHEMATICS

(Recommended curriculum for a major in Mathematics without right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
Mathematics 107	3	Mathematics 108	2
Physical Education 110	½	Mathematics 113	3
Social Science 100	3	Physical Education 110	½
Sociology 100	1	Social Science 101	3
Elective	5	Sociology 101	1
		Elective	5
	15½		17½

Second Year

English 211	3	English 212	3
Mathematics 232	3	Mathematics 251	5
Physical Education 110	½	Physical Education 110	½
Physics 201	5	Physics 202	5
Elective	5	Elective	3
	16½		16½

Third Year

English Elective	3	*Mathematics Elective	3
Mathematics 352	3	Elective	13
Elective	10		
	16		16

Fourth Year

*Mathematics Elective	3	*Mathematics Elective	3
Elective	13	Elective	13
	16		16

* Electives to be taken from Mathematics 321, 334, 407, 453, 454, 455 and 456.

MATHEMATICS AND ASTRONOMY

LOWER DIVISION COURSES

Mathematics 101. Arithmetic. **One hour.**

This course is only for students showing deficiencies in arithmetic as determined by a preliminary test.

The decimal system of notation; the fundamental operations applied to whole numbers and common fractions; decimal fractions; units of measurement; ratio and proportion; percents; simplified computation.

Mathematics 102. Intermediate Algebra. **One hour.**

This course is only for students showing deficiencies in algebra as determined by a preliminary test, that would indicate their inability to carry on the work in Mathematics 107.

Signed numbers; fundamental operations; equations and stated problems; factoring; fractions; exponents, roots and radicals; graphical methods; quadratic equations.

Mathematics 107. (Formerly Mathematics 10.) College Algebra I. **Three hours.**

Review of high school algebra; exponents and radicals; functions and their graphs; equations and their solutions; systems of linear and quadratic equations; ratio and proportion; progressions.

Mathematics 108. (Formerly Mathematics 11.) College Algebra II. **Two hours.**

Prerequisite: Mathematics 107.

Mathematical induction; binomial theorem; theory of equations; permutations; combinations; probability; deterinants; partial fractions.

Mathematics 113. (Formerly Mathematics 12.) Trigonometry. **Three hours.**

Prerequisite: Mathematics 107.

The trigonometric functions; logarithms; right triangle; radian measure; properties of the trigonometric functions; functions of two angles; the oblique triangle; the inverse trigonometric functions.

Mathematics 131. (Formerly Mathematics 20, 231.) Solid Geometry. **Three hours.**

Fundamental propositions, problems, and exercises of solid geometry.

Mathematics 232. (Formerly Mathematics 21.) Analytic Geometry. **Three hours.**

Prerequisites: Mathematics 108, 113.

Graphs and loci; polar coordinates; straight line; circle; conic sections; general equation of the second degree; elements of solid analytic geometry.

Mathematics 251. (Formerly Mathematics 22 and 23.) Differential Calculus. **Five hours.**

Prerequisite: Mathematics 232.

Variables; functions; differentiation; applications of the derivative; successive differentiation; parametric and polar equations and roots; differentials; curvature; theorem of mean value and its application; series; expansions of functions; partial differentiation; integration by elementary forms.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Mathematics 321. (Formerly Mathematics 30.) General Astronomy. **Three hours.**

Development of astronomy as a science; development of the solar system; astronomical instruments; better known facts of astronomy.

Mathematics 334. (Formerly Mathematics 34.) College Geometry. **Three hours.**

Prerequisite: Mathematics 232.

Geometric constructions; properties of the triangle; transversals; harmonic properties of circles.

Mathematics 352. (Formerly Mathematics 32.) Integral Calculus. **Three hours.**

Prerequisite: Mathematics 251.

Integration; constant of integration; definite integral; integration as a process of summation; centroids; fluid pressure; other applications and multiple integrals.

Mathematics 407. (Formerly Mathematics 33.) Theory of Equations. **Three hours.**

Prerequisite: Mathematics 251 or enrollment in Mathematics 251.

Graphs; complex numbers; cubic equations; quartic equations; determinants and symmetric functions.

Mathematics 453. (Formerly Mathematics 41.) Differential Equations. **Three hours.**

Prerequisite: Mathematics 352.

Differential equations of the first order; applications; singular solutions; linear equations with constant coefficients; miscellaneous methods for solving equations of higher order than the first; integration in series; total differential equations.

Mathematics 454. (Formerly Mathematics 42.) Advanced Calculus. **Three hours.**

Prerequisite: Mathematics 352.

Indeterminate forms; power series; partial differentiation; implicit functions and applications to geometry.

Mathematics 455. Theoretical Mechanics. **Three hours.**

Same as Physics 455.

Mathematics 456. (Also listed as Physics 456.) Vector Analysis and Its Physical Application. **Three hours.**

May be taken either in the Mathematics or Physics Department.

Prerequisites: Mathematics 352 and Physics 202.

The algebra and calculus of vectors. Applications of vector analysis to solution of problems in geometry and physics.

Mathematics 467. (Formerly Mathematics 46.) Teaching of High School Mathematics. **Three hours.**

Prerequisite: Ten hours of college mathematics or consent of Head of the Department.

Aims of high school mathematics; importance of high school mathematics; history of mathematics; problems of teaching applied to mathematics; methods of teaching algebra, plane and solid geometry, trigonometry, and high school arithmetic, selection of problems; types of examinations and their importance; class instruction as applied to mathematics; importance of assignment and methods of study.

ROTC

MILITARY SCIENCE AND TACTICS

The primary mission of the Reserve Officers Training Corps is to produce junior officers who have the qualities and attributes essential to their progressive continued development as officers in the Army of the United States.

The secondary mission is to give educational training which, through the years, has been found distinctly valuable by college students who have taken the course.

As an essential element of military training, certain details of conduct are stressed, in order that, upon completion of his training, the student may be well disciplined in mind and body. The particular methods employed by the military department are but a means to an end. The basic aim is to cultivate in each student habits of cheerful and unquestioning response to proper authority, loyalty, patriotism, self-control, precision, and alertness. These qualities, together with professional knowledge and experience in command, develop leadership and personality, both valuable in peace and war.

The Federal Government supports military training (ROTC) by providing uniforms or their money equivalent; by detailing instructors and maintenance personnel from the Regular Army; by furnishing army equipment; and in the case of advanced students, by monthly money payments determined annually. ROTC training is given by the College under the regulations and supervision of the Department of the Army. Credit towards graduation is allowed as for other college courses.

ROTC training contemplates four years of work. The complete course is divided into two parts; the BASIC course and the ADVANCED course, each of four semesters duration. Having enrolled in either course, a student will be required to complete the course, unless he is released by proper authority or leaves school.

To be eligible for enrollment in the ROTC, students must be citizens of the United States, physically fit, and accepted for such training by the Professor of Military Science and Tactics. Special recognition is given students who have had previous military training or service in any of the armed forces. Students who have had more than six months in the armed forces may be enrolled in the second year Basic Course. Students who have had more than one year in the armed forces may be enrolled in the first year Advanced Course. However, ex-members of the armed forces who are College Freshmen will not be enrolled in the first year Advanced Course, but may be enrolled in the second year Basic Course. Students who have had previous ROTC training, in Senior or Junior Division Units, should see the Professor of Military Science and Tactics prior to enrollment. Students who are members of the Enlisted Reserve of the Air Force, Navy or Marine Corps may be

permitted to pursue the course without expense to the government pending separation from the Enlisted Reserve of these services.

Enrollment for the Basic Course is voluntary and does not in itself obligate the student for active military service. Upon completion of the course the student will receive a certification of the training received.

Enrollment for the Advanced Course is voluntary. By so enrolling, the student obligates himself upon completion of the course to accept a commission as a Second Lieutenant of Artillery in the Officers Reserve Corps.

Regular Army Appointments.—Outstanding members of the Advanced Course may be designated Distinguished Military Students by the Professor of Military Science and Tactics. When such students have completed the ROTC Course, are commissioned in the Officers Reserve Corps, and are graduated from college they will be designated Distinguished Military Graduates, provided they have maintained the qualifications for Distinguished Military Students.

Distinguished Military Students may apply for commissions in the Regular Army. Successful applicants will be ordered to duty as Second Lieutenants, Regular Army, after they have been designated Distinguished Military Graduates.

All other students who received commissions as Second Lieutenants, Officers Reserve Corps, are eligible to apply for competitive tours of active duty to compete for commissions in the Regular Army.

Draft Deferment.—Deferment of induction under the selective service act of 1948 and 1950 may be accorded ROTC students who meet certain specific requirements under current regulations and within the quotas allowed. Such deferment does not relieve the individual from the necessity of registering with his local draft board.

Allowances and Cost.—Students enrolling in the basic course receive no cash allowance but are issued a uniform for their personal wear. A deposit of five (5) dollars is required on these items to cover possible loss or damage not due to ordinary wear and tear. The deposit is returned to students at the end of the school term or upon return of the articles of uniform.

A student who enrolls in the advanced course receives a daily subsistence allowance (approximately $0.90 per day) for the duration of his enrollment in the course, exclusive of the camp period, amounting to about $500.00. An officers' type uniform, complete with overcoat, shoes, shirts and cap, is furnished free of cost to each of these students on a loan basis.

Between the first and second year of the advanced course the student is required to attend a training camp of approximately six weeks duration. He receives travel pay from his home or school to camp and return, at the rate of five cents per mile. He is given free medical attention, fed, clothed, and, in addition, is paid at the rate of seventy-eight (78) dollars per month while there. During the camp the student puts into practice what he has learned during his instruction in the school ROTC unit. Any emoluments mentioned above are in addition to benefits received through the "G. I. Bill of Rights."

MILITARY SCIENCE

LOWER DIVISION COURSES (BASIC)

Military Science 101. Introduction to Military Science. **Two hours.**

National Defense Act and ROTC: Military Organization, first aid and hygiene; evolution of warfare; military problems of the U. S.; leadership, drill and exercise of command.

Military Science 101a. Basic course in Military Band. **Two hours.**

Military Science 102. Basic Military Training. **Two hours.**

Prerequisite: Military Science 101 or equivalent.

Maps and aerial photos; individual weapons and marksmanship; leadership, drill and exercise of command.

Military Science 102a. Basic course in Military Band. **Two hours.**

Prerequisite: Military Science 101a.

Military Science 201. Introduction to Field Artillery Technique. **Two hours.**

Prerequisite: Military Science 102 or equivalent.

Service of the piece; materiel; Field Artillery organization; leadership, drill and exercise of command.

Military Science 201a. Basic course in Military Band. **Two hours.**

Prerequisite: Military Science 102a.

Military Science 202. Introduction to Field Artillery Technique. **Two hours.**

Prerequisite: Military Science 201 or equivalent.

Communications; motors and transportation; care and use of instruments, leadership, drill and exercise of command.

Military Science 202a. Basic course in Military Band. **Two hours.**

Prerequisite: Military Science 201a.

UPPER DIVISION COURSES (ADVANCED)

(Open to selected students who have completed the Basic Course and to selected veterans with at least twelve months of military service.)

Military Science 301. First Year Advanced Military Training. **Four hours.**

Prerequisite: Basic courses or equivalent.

Duties of the Battery Executive; surveying; communications; field artillery tactics; individual weapons and marksmanship; leadership, drill and exercise of command.

Military Science 302. First Year Advanced Military Training. **Four hours.**

Prerequisite: Military Science 301.

Basic field artillery gunnery; leadership, drill and exercise of command.

Military Science 401. Second Year Advanced Military Training. **Four hours.**

Prerequisite: Military Science 302.

Military administration; advanced surveying; supply and evacuation; advanced gunnery; fire direction center; psychological warfare; leadership, drill and exercise of command.

Military Science 402. Second Year Advanced Military Training. **Four hours.**

Prerequisite: Military Science 401.

Advanced artillery tactics; military teaching methods; the military team; combat intelligence; command and staff; new developments; geographical foundations of national power; military law and boards; leadership, drill and exercise of command.

MUSIC

Background. Before selecting the field of music for special or major concentration, the student will consult with the head of the department. Because the training of a music teacher requires a better musical background, together with more knowledge and skill, than may be acquired during the normal four years of college, students who select music as a major should have had some pre-college music training and must have certain natural aptitudes. It is highly desirable that a student be fairly proficient pianist before coming to college. However, proficiency on some other instrument may have an equivalent value.

Ensemble Participation. The requirements for ensemble participation are the same for all areas and majors in music, both professional and non-professional degrees. The student should, during the first semester in college, make plans with the head of the department for the proper satisfaction of this requirement.

Recital Attendance. Students who are taking applied music for credit will be expected to attend a specified number of recitals and concerts. Unless this condition is met, credit will not be given.

Public Performance. Before accepting an engagement for public performance, the student of applied music must secure the approval of his teacher in that particular field.

Piano Requirements. Since the piano is a basic instrument in the teaching of music in the public schools, the student must fulfill certain minimum piano requirements before graduation. Every music area student should have a degree of proficiency at the piano which will permit him to play simple accompaniments at sight and community songs such as those found in the "Twice 55" song book. It is important that he play with accuracy, assurance, and up to tempo. The credit requirements for piano are four semester hours. If the minimum requirements are not met after the completion of four semester hours the student must continue piano lessons until he has satisfied the faculty that he can fulfill the minimum requirements. Piano lessons should be started the first semester in college and continue until minimum requirements have been reached.

A student with piano as his major instrument should attain a degree of technical and artistic proficiency far in advance of the minimum requirements. He will be expected to appear as soloist in recitals, and also to be able to play accompaniments competently.

MUSIC AREA

(Recommended curriculum in the area of Music with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
Music 112	2	Music 112	2
Music 130	2	Music 131	2
Music 180	2	Music 182	2
Music 181	2	Music 192	2
Music 191	2	Physical Education 110	½
Physical Education 110	½	Social Science 101	3
Social Science 100	3	Sociology 101	1
Sociology 100	1		
	17½		15½

Second Year

English 211	3	English 212	3
Music 122	2	Music 122	2
Music 150	1	Music 151	1
Music 271	3	Music 282	2
Music 281	2	Music 292	2
Music 291	2	Physical Education 110	½
Physical Education 110	½	Science 110 or 112	3
Science 109 or 111	3	Elective	3
	16½		16½

Third Year

Education 215	3	Education 216	3
[2]Music 363	2	Health 201	3
Music 371	2	[2]Music 364	2
Music 381	2	Music 372	2
Music, Applied Elective	2	Music 382	2
Health or Physical Education Elective	1	Music 383	2
Elective	4	Music, Applied Elective	2
	16		16

Fourth Year

Education 384	3	Education 364	6
[2]Music 366	2	Education 463	10
[2]Music 380	2		
Elective	9		
	16		16

[1] The sequence of applied music courses is suggestive only and is subject to modification upon recommendation by the head of the department, by reason of the background, ability or major interest of the student.

[2] Music 363 and 364 may be offered in alternate years with 380 and 366.

Summary of Music Reommendation for Area with Right of Certification

	Hours
Music 180, Elements of Music	2
Music 181-182, Beginning Harmony I-II	4
Music 191-192, Beginning Sight Singing and Ear Training I-II	4
Music 281-282, Advanced Harmony I-II	4
Music 291-292, Advanced Sight Singing and Ear Training I-II	4
Music 380, Form and Analysis	2
Music 381-382, Counterpoint I-II	4
Music 383, Orchestration	2
Music 271, Enjoyment of Music	3
Music, 371-372, Music History I-II	4
Music 366, Conducting	2
Music 363, Grade Methods and Materials	2
[1]Music 364, High School Music	2
[2]Music 112, Piano	4
Music 122, Voice	4
Music, Applied Elective	4
Music 150-151, Band Instrument Class I-II	4
Music 130-131, String Class I-II	2
[3]Ensemble	6-9
	63-66

Summary of Music Recommendations for Area Without Certification

	Hours
Music 180, Elements of Music	2
Music 181-182, Beginning Harmony I-II	4
Music 191-192, Beginning Sight Singing and Ear Training I-II	4
Music 281-282, Advanced Harmony I-II	4
Music 291-292, Advanced Sight Singing and Ear Training I-II	4
Music 380, Form and Analysis	2
Music 271, Enjoyment of Music	3
Music 371-372, History of Music I-II	4
Music 361 or 362, Teaching Repertory (Piano or Voice)	1
Music Applied Elective	16
[3]Ensemble	6-9
	55-58

MAJOR IN MUSIC

The following courses are recommended for a major in Music **with** right of teaching certificate:

	Hours
Music 180, Elements of Music	2
Music 181-182, Beginning Harmony I-II	4
Music 191-192, Beginning Sight Singing and Ear Training I-II	4
[4]Music 366, Conducting	2
Music 363, Grade Methods and Materials	2
Music 271, Enjoyment of Music	3
[5]Music, Applied Elective	5
[6]Music 130-131, String Class I-II	2
or	
[6]Music 150-151, Band Instrument Class I-II	4
	24-26

[1] Students whose principal interest is in piano and who select the piano field of ensemble participation may substitute Music 361 (Teaching Repertory) and 364 (Teaching Piano in Classes) for Orchestration and for High School Music. If only one substitution is made, Orchestration will be the course to be dropped.

[2] The student may find it necessary to take additional piano lessons in order to fulfill to the satisfaction of the faculty the requirements for the State Council of Higher Education that a student must have "enough piano to insure competency to play simple accompaniments and materials such as are found in the Golden Book."

[3] See optional fields of ensemble participation in page 159.

[4] Students whose principal musical interest is in piano and who elect the piano field for their ensemble participation may substitute Music 361 (Teaching Repertory) for Music 366 (Conducting).

[5] Five hours, to be taken in one or more fields, upon recommendation of advisor.

[6] After consultation with student, the advisor will recommend Music 130-131, or Music 150-151.

MAJOR IN MUSIC

The following courses are recommended for a major in Music **without** right of teaching certificate:

	Hours
Music 180, Elements of Music	2
Music 181-182, Beginning Harmony I-II	4
Music 191-192, Beginning Sight Singing and Ear Training I-II	4
Music 271, Enjoyment of Music	3
Music 371-372, History of Music I-II	4
[1]Applied Music	8
	25

Optional Fields of Ensemble Participation

These requirements are the same for graduation with right of teaching certificate and without the right of teaching certificate, both for the major and for the area. Every music major shall, upon consultation with his faculty advisor and with the head of the department, select one of the following fields of ensemble participation. Such participation must begin with the first semester of the freshman year unless other arrangements are approved by advisors. In order to discharge the requirements for ensemble participation, only consecutive semesters shall be considered as constituting a year. This statement represents only the minimum requirement for music majors; more extensive participation is advised for the sake of the musical and professional growth of the individual. Except in Music 121 (Choir), credit in ensemble shall be given only for semesters which are consecutive.

Voice

4 years Choir/Glee club
1 year Piano (4 hrs.) in addition to 4 hours required in general curriculum, making a total requirement of 8 hours of piano.

5 years Total

Orchestra

4 years Orchestra
1 year Choir

5 years Total

Piano

2 years Choir
2 years Accompanying
1 year Elective (Choir/Orchestra/Band/Accompanying.)

5 years Total

Band

5 years Band/Orchestra, of which 4 years must be Band
1 year Choir

6 years Total

MINOR IN MUSIC

A student may elect a minor in Music. Courses for the minor must be approved by the Head of the Department of Music.

[1] It is recommended that the 8 hours of applied music credit in this curriculum be distributed evenly throughout the 8 semesters. The credit shall be earned in a single field of applied music unless the teacher concerned and the head of the department recommended otherwise.

MUSIC FEES

Class Instruction

Music 130, 131, 151, 152 ..... $ 5.00

Individual Instruction

Piano, Voice, Violin, Organ, Violoncello, Wind Instruments

Two lessons per week, one semester 36.00
One lesson per week, one semester 22.50
Practice room with piano, one hour daily, one semester 5.00
Use of college-owned violin, one semester 3.00

MUSIC

LOWER DIVISION COURSES

[1]**Music 11.** (Formerly Music 1a, b, c.) Piano. **No credit.**
See music fees.
Introductory course for the non-musician preparatory to Music 112.

[1]**Music 12.** (Formerly Music 2a, b, c.) Voice. **No credit.**
See music fees.
Introductory course for the non-musician preparatory to Music 122.

[1]**Music 13a.** (Formerly Music 3a, b, c.) Violin. **No credit.**
See music fees.
An itroductory course to prepare the student to enter Music 132.

[1]**Music 13b.** (Formerly Music 4a, b, c.) Violoncello. **No credit.**
See music fees.

[1]**Music 15.** (Formerly Music 6a, b, c.) Wind instruments. **No credit.**
See music fees.
Introductory course for those who wish to learn to play any of the wood-wind or brass instruments.

[1]**Music 112.** (Formerly Music 11a-0.) Piano. **Two hours.**
See music fees.
Two lessons per week, with approximately six hours of practice and study per week.

Music 120. (Formerly Music 20.) Chorus. **One hour.**
To encourage and foster a knowledge of and a desire to participate in choral singing; to teach part singing; to familiarize students with standard community and folk songs and with the more familiar choral works and simpler modern works for mixed chorus; to acquaint prospective teachers with desirable high school choral material; to illustrate ideals of choral singing and methods of attaining them.

Music 121. (Formerly Music 20a.) Choir. **One hour.**
The College Choir is open to all college students who qualify. The organization aims to develop and perpetuate a high standard of choral-ensemble singing. Each year the Choir makes a number of appearances on the campus and before high schools and other organizations. It also assists in the presentation of the Messiah, Baccalaureate, and other programs. Membership in the Choir will include attendance at rehearsals for these programs.

[1]**Music 122.** (Formerly Music 12a-1.) Voice. ..**Two hours.**
See music fees.

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[1] Music 11, 12, 13a, 13b, 15, and the first four semesters of Music 112, 122, 132, and 152 may be individual instruction or instruction in small groups, at the discretion of the instructor and the head of the department.

Music 130 and 131. (Formerly Music 10a, b, c.) String Class. **One hour.**

To provide for the beginner who wishes to learn to play a string instrument an opportunity to study under the stimulus of class instrutcion; to start the beginner on the road toward sufficient playing and technical ability to teach strings in class and to train the string section of a school orchestra.

The first semester and part of the second are devoted to the study of one particular instrument. The second semester devotes some attention to the string instruments which are not studied in class.

[1]**Music 132.** (Formerly Music 13a-1.) Violin. **Two hours.**

See music fees.

[1]**Music 136.** (Formerly Music 14a-f.) Violoncello. **Two hours.**

See music fees.

[1]**Music 142.** (Formerly Music 15a-1.) Organ. **Two hours.**

Prerequisite: Four years of piano study.

See music fees.

Music 150. (Formerly Music 16a.) Band Instrument Class I. **Two hours.**

See music fees.

A class in woodwind instruments, with some attention to percussion. Practical instruction in methods of tone production, tuning, fingering, and care of the instruments; group instruction, involving handling and playing of the woodwind instruments of the band and orchestra; the examination of materials suitable for beginning bands. This course will give the student some practical experience in elementary conducting.

Music 151. (Formerly Music 16b.) Band Instrument Class II. **Two hours.**

See music fees.

A class in brass instruments, with some attention to percussion, similar to Music 150.

[1]**Music 152.** Wind Instrument. **Two hours.**

See music fees.

Music 180. (Formerly Music 18.) Elements of Music. **Two hours.**

Staff notation, notes, rests, clefs, scales, (various modes), keys, meter, chromatic tones, intervals, chords, cadences, abbreviations, and other symbols; music terms; elements of form; solmization; music writing and simple dictation.

Music 181. (Formerly Music 28a.) Beginning Harmony I. **Two hours.**

Four voice part writing based on primary triads; the dominant seventh; melodic passing tones and embellishments; keyboard work consisting of scales, triads, etc.

Music 182. (Formerly Music 28b-c.) Beginning Harmony II. **Two hours.**

Prerequisite: Music 181.

Continuation of first term harmony; use of secondary triads and inversions in major and minor keys; harmonizations with figured bass and given soprano; original composition in simple forms; keyboard work with cadences and elementary harmonization; secondary chords of the seventh; modulation to nearly related keys; continuation of keyboard and original work.

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[1] Music 11, 12, 13a, 13b, 15, and the first four semesters of Music 112, 122, 132, and 152 may be individual instruction or instruction in small groups, at the discretion of the instructor and the head of the department.

Music 191. (Formerly Music 29a.) Beginning Sight Singing and Ear Training I. **Two hours.**

Sight singing of melodic exerises in major and minor keys and in various rhythms; tone group, and verbal and tonal dictation; interval drill.

Music 192. (Formerly Music 29b-c.) Beginning Sight Singing and Ear Training II. **Two hours.**

Prerequisite: Music 191.

[2]**Music 210.** Band. **One-half hour.**

[2]**Music 220.** Orchestra. **One-half hour.**

[2]**Music 230.** Girls' Glee Club. **One-half hour.**

[2]**Music 240.** Men's Glee Club. **One-half hour.**

Music 260. (Formerly Music 25a-b.) Public Scool Music. **Three hours.**

Such knowledge of music theory and of the principles of notation as it is needed by the grade teacher; the aims of music in the grades; the child voice; tone quality; the unmusical singer; rhythmic development; use of the pitch pipe; rote songs; use of the phonograph in teaching songs, together with increasing ability in music reading on the part of the student.

Music 271. (Formerly Music 27 and 171.) The Enjoyment of Music. **Three hours.**

The most interesting music from all periods and styles. Besides the regular library of recorded music, there is available for this course the Carnegie Music Set, including reproducing machine and record library. Open to all students, with additional assignments to be asked of students majoring in music.

Music 281. (Formerly Music 38a.) Advanced Harmony I. **Two hours.**

Prerequisite: Music 182.

Extraneous modulation; secondary chords of the seventh; analysis of sonatas of Haydn and Mozart; study of melodic and harmonic development; chords of the Neopolitan sixth; augmented sixth.

Music 282. (Formerly Music 38b-c.) Advanced Harmony II. **Two hours.**

Modulation through use of the diminished seventh chord; analysis and memorizing a Bach choral; writing a sonata, allegro form.

Music 291. Formerly 39a.) Advanced Sight Singing and Ear Training I. **Two hours.**

Music 292. (Formerly Music 39b-c.) Advanced Sight Singing and Ear Training II. **Two hours.**

Prerequisite: Music 291.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Music 312. Piano. **One or two hours.**

Music 322. Voice. **One or two hours.**

Music 332. Violin. **One or two hours.**

Music 336. Violoncello. **One or two hours.**

Music 342. Organ. **One or two hours.**

Music 352. Wind Instrument. **One or two hours.**

Music 361. Teaching Repertory, Piano. **One hour.**

This course is designed to widen the student's acquaintance with piano literature, to give him a repertoire of teaching material, a knowledge of teaching procedures. A note book containing notes on methods of attacking technical problems, lists of teaching materials for various grades, etc., is required.

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[2] Consecutive semesters in this course will be required for credit; any two consecutive semesters will earn one hour of credit. Admission to membership upon approval of instructor.

Music 362. Teaching Repertory, Voice. **One hour.**

This course is designed to widen the student's acquaintance with voice literature, to give him a repertoire of teaching material, and a knowledge of teaching procedures. A note book containing notes on methods of attacking technical problems, lists of teaching materials for various grades, etc., is required.

Music 363. (Formerly Music 41a.) Grade Methods and Materials. **Two hours.**

Prerequisite: Music 260 or 180 or the equivalent.

A course in the teaching and supervision of music in the grades, designed primarily for music majors.

Music 364. (Formerly Music 41b.) High School Music. **Two hours.**

A course in the teaching and administration of high school music, designed primarily for music majors.

Music 366. (Formerly Music 42.) Conducting. **Two hours.**

Prerequisites: Musical training and experience adequate to the comprehension and manipulation of the subject matter of this course.

Technique of the baton; tempo; attack; release; phrasing; dynamics; seating of the chorus and orchestra; discipline of rehearsals; community music.

Music 371. (Formerly Music 37a.) Music History I. **Two hours.**

Archaic and medieval music; organization of church music; music of the Renaissance and Reformation; music of Elizabethan England; early classical composers; Bach, Handel, Haydn, and Mozart, the early Beethoven.

This course and Music 372 are organized primarily for music majors. Because of the background required for this course, non-music majors will be admitted only upon recommendation of the head of the department.

Music 372. (Formerly Music 37b-c.) Music History II. **Two hours.**

Romanticism in music; the Romantic opera; development of piano music; the art song; late Romantic and national trends in music; modern music; Impressionism; atonality; Beethoven; Schubert; Schumann; Chopin; Liszt; Wagner; Debussy; Ravel; Hindemith; Stravinsky; Jazz influence in American music; Harris; Gershwin, etc.

Music 380. Form and Analysis. **Two hours.**

[3]**Music 381.** Counterpoint I. **Two hours.**

[3]**Music 382.** Counterpoint II. **Two hours.**

[3]**Music 383.** Orchestration. **Two hours.**

Music 461. (Formerly Music 44a.) Band and Orchestra Procedures and Materials I. **Two hours.**

Analysis and organization of various courses of study for instrumental groups of varying abilities; rehearsal routines; training student sectional leaders; duties which may be assumed by students; adaptation of practice quarters to fit acoustical needs; program mechanics for public appearances; publicizing and interpreting music activities; care of equipment; program and teaching materials consideration of the modified Prescott system and similar courses of study.

Music 462. (Formerly Music 44b.) Band and Orchestra Procedures and Materials II. **Two hours.**

Continuation of Music 461.

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[3] During semesters when Music 381, 382, 481, 482, 483 are not offered as regular classes they may be taken as individual instruction, under the same arrangements as instruction in Applied Music.

Music 463. (Formerly Music 43a, b, c.) Teaching Piano in Classes. **Two hours.**

Prerequisite: Three years of piano study in college or the equivalent.

[3]**Music 481.** Canon and Fugue I. **Two hours.**

[3]**Music 482.** Canon and Fugue II. **Two hours.**

[3]**Music 483.** Composition. **Two hours.**

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[3] During semesters when Music 381, 382, 481, 482, 483 are not offered as regular classes they may be taken as individual instruction, under the same arrangements as instruction in Applied Music.

GRADUATE DIVISION COURSES

Music 512. Piano. **One or two hours.**

Music 522. Voice. **One or two hours.**

Music 532. Violin. **One or two hours.**

Music 536. Violoncello. **One or two hours.**

Music 542. Organ. **One or two hours.**

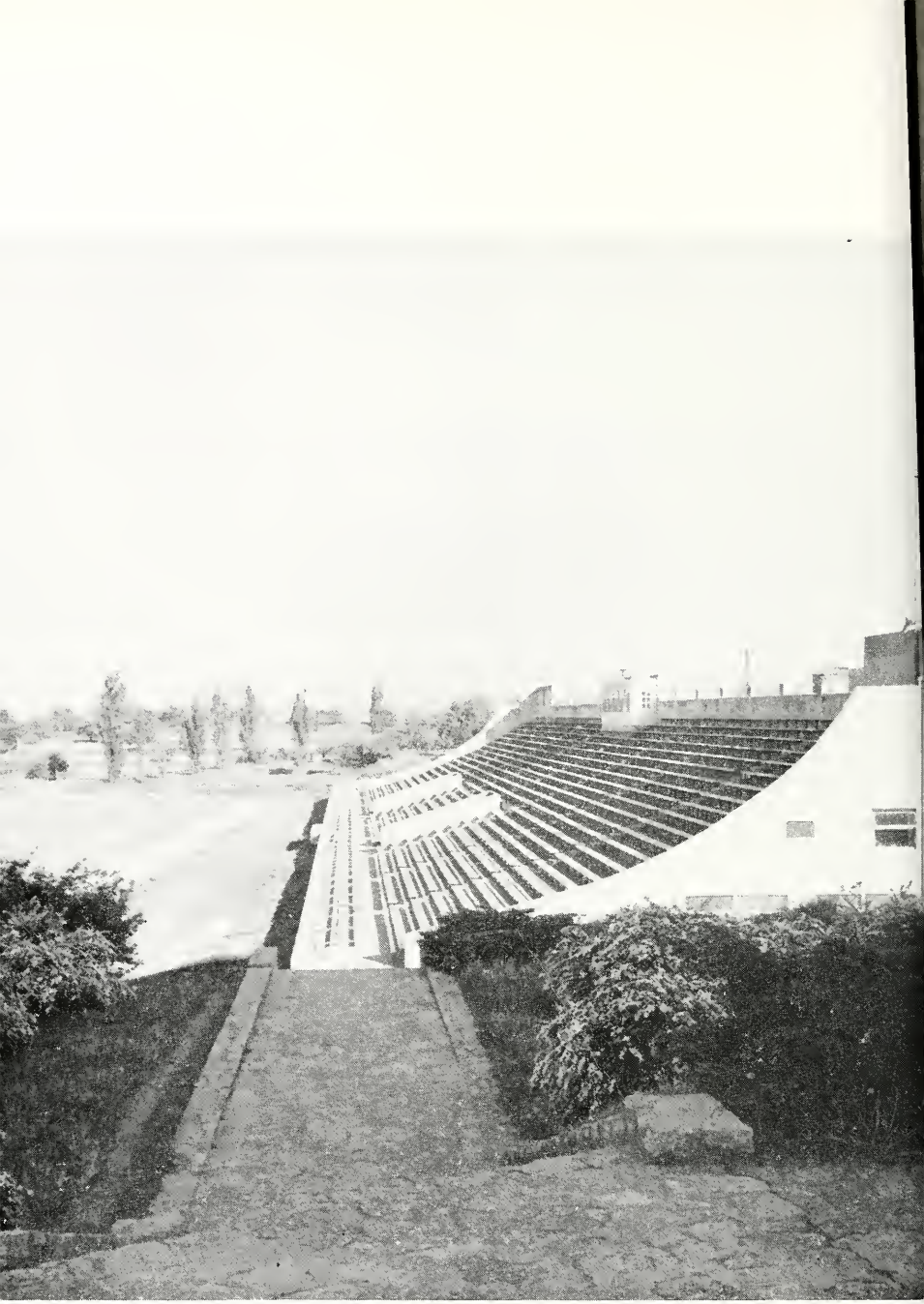
Music 552. Wind Instrument. **One or two hours.**

Music 553. Pedadogy of Wind Instruments. **Two hours.**

Music 581. Acoustics, Construction and Development of Musical Instruments. **Three hours.**

Prerequisite: Music 151-152, or the equivalent.

A graduate research course, investigating the historical development, the construction, the acoustical properties of wind instruments. The student is expected to complete three research projects each semester.



HANGER STADIUM

PHYSICAL EDUCATION

Major in Physical Education

Students may major in Physical Education by taking the related subjects which are required in the curriculum for a major in Health and Physical Education. They must also take a minor in Health and a minor in some other field. In adition they will have to take the following Physical Education courses: Physical Education 126, 220, 300, 345, 366, 367, 310, 340, 401, 468. Additional courses for men: Physical Education 250, 261 or 360, 362, 420. Additional courses for women: 225, 251, 252, 361.

Minor in Physical Education

A student with a major in Health may take the following courses for a minor in Physical Education: Physical Education 126, 220, 300, 310, 366, 401, 468. Additional courses for men: 250, 360 or 420, 367. Additional courses for women: 252, 361.

LOWER DIVISION COURSES

Physical Education 110. (Formerly Physical Education 10.) Fundamental Physical Education Activities. **One-half hour.** Fee, $3.25.

To promote the development of physical efficiency and skills. The course is divided into sections as indicated below:

Physical Education 110-a, Elementary Tumbling and Apparatus.

Physical Education 110b, Elementary Swimming.

Physical Education 110-c, Fundamentals of Touch Football.

Physical Education 110-d, Fundamentals of Basketball.

Physical Education 110-e, Fundamentals of Softball.

Physical Education 110-f, Fundamentals of Volleyball.

Physical Education 110-g, Fundamentals of Tennis.

Physical Education 110-h, Fundamentals of Handball.

Physical Education 110-i, Fundamentals of Boxing and Wrestling.

Physical Education 110-j, Fundamentals of Badminton and Aerial Dart.

Physical Education 110-k, Fundamentals of Shuffleboard, Paddle Tennis, and Table Tennis.

Physical Education 110-1, Folk Dancing and Singing Games.

Physical Education 110-m, Clogging.

Physical Education 110-n, Archery.

Physical Education 110-s, Hockey.

Physical Education 125. (Formerly Physical Education 11.) Introduction to Physical Education. **One hour.**

Place of physical education in general education and American life; consideration of comparative physical education.

Physical Education 126. History and Principles of Physical Education. **Two hours.**

This course is designed to serve the major and minor student in the professional curriculum. It is hoped the ideas presented will help them organize and

conduct their programs more as reflections of biological fact and social ideals than as echoes of tradition or prejudice.

Physical Education 220. (Formerly Physical Education 20.) Plays and Games for the Elementary Grades. **Two hours.**

Materials, methods and practice in physical education activities suitable for children in the elementary school. Fee, $2.50.

Physical Education 225. (Formerly Physical Education 21.) Games and Sports for the Secondary School. **Two hours.**

Physical education activities suitable for junior and senior high school students. Fee, $2.50.

Physical Education 250. (Formerly Physical Education 26.) Scouting and Clubcraft. (Men.) **Two hours.**

History and principles of scouting; practical scoutcraft and clubcraft. The scoutmaster's certificate is awarded to those completing the course. Fee, $.75.

Physical Education 251. (Formerly Physical Education 25.) Clubcraft. (Women.) **Two hours.**

National girls' organizations such as Girl Scouts, Camp Fire Girls, Girl Reserves, and 4-H Clubs; leadership and organization of clubs.

Physical Education 252. (Formerly Physical Education 27.) Softball, Volley Ball and Tennis. Coaching Fundamentals for Women. **Two hours.**

Prerequisite: Experiences in these games in W.R.A. or Physical Education 110.

Theory and practice of techniques and teaching procedures of softball, volley ball and tennis for women. Also lead-up games for these sports. Fee, $2.50.

Physical Education 261. (Formerly Physical Education 24 and 265.) Coaching Baseball. **Two hours.**

Theory and practice in coaching the fundamentals of baseball; team offense and defense. Fee, $2.50.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Physical Education 300. (Formerly Physical Education 30.) Folk and National Dancing. **Two hours.**

Traditional and social dances of the United States and other countries. Fee, $2.50.

Physical Education 310. Individual Sports. **Two hours.**

The fundamental skills of the following individual sports are taught. Badminton, aerial dart, shuffleboard, archery, paddle tennis and table tennis.

Physical Education 320. (Formerly Physical Education 31.) Kinesiology. **Two hours.**

Fundamentals of body mechanics; movements of the human body.

Physical Education 325. (Formerly Physical Education 32.) Physiology of Activity. **Two hours.**

Effects of physical education activities on the various systems of the human body.

Physical Education 340. Advanced Swimming and Water Safety. **Two hours.**

Prerequisite: To have passed the Red Cross Beginners and Intermediate swimming tests or their equivalent. A screening test will be given those who have not had the opportunity to take Red Cross tests to determine if they are eligible to take the class.

Emphasis on advanced skills in swimming and water safety in which the Red Cross Instructors Course in Water Safety will be taught.

Physical Education 345. (Formerly Physical Education 35a, 35b, and 245a, 245b.) Modern Dance. **Two hours.**

Modern dance and the fundamentals of movement and rhythm; dance composition. Fee, $2.50.

Physical Education 360. (Formerly Physical Education 37 and 260.) Coaching Basketball. **Two hours.**

Theory and practice in coaching the fundamentals of basketball; team offense and defense. Fee, $2.50.

Physical Education 361. (Formerly Physical Education 38.) Basketball and Field Hockey Coaching for Women. **Two hours.**

Prerequisite: Experiences in these games in W. R. A. or Physical Education 110.

Theory and practice of techniques and teaching procedures of basketball and field hockey for women; lead-up games for these sports. Fee, $2.50.

Physical Education 362. (Formerly Physical Education 39 and 265.) Coaching Track and Field. **Two hours.**

Theory and practice in coaching fundamentals involved in track and field. Fee, $2.50.

Physical Education 366. (Formerly Physical Education 36.) Materials and Methods for Teaching Physical Education. **Two hours.**

Theories of play; study of existing play programs; correlation with other subjects; games, skills, lesson planning and observation.

Physical Education 367. (Formerly Physical Education 34.) Advanced Physical Training Activities. **One hour.**

Prerequisite: Physical Education 110a.

Advanced tactics; drills for demonstrations; pyramid building; tumbling; apparatus; opportunity for leadership and observation. Fee, $3.25.

Physical Education 401. (Formerly Physical Education 40.) Community Recreation. **Two hours.**

The problems of leisure; vacation time for children; adult recreation; content of school programs for leisure education; physical education; dramatics; reading; music, art and handcrafts; nature study; extracurricular activities. Fee, $2.50.

Physical Education 420. (Formerly Physical Education 42 and 260.) Coaching Football. **Two hours.**

Theory and practice in coaching the fundamentals of football; team offense and defense. Fee, $2.50.

Physical Eduaction 468. (Formerly Physical Education 46.) Administration and Organization of Physical Education. **Two hours.**

Policies and procedures of administration on the elementary and secondary school level. Special emphasis on construction and care of facilities, equipment, and supervision of personnel.

PHYSICS

(Recommended curriculum for a major in Physics with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Chemistry 111	5	Chemistry 112	5
English 101	3	English 102	3
Mathematics 107	3	Mathematics 113	3
Physical Education 110	½	Physical Education 110	½
Physics 131	5	Physics 132	5
Sociology 100	1	Sociology 101	1
	17½		17½

Second Year

English 211	3	English 212	3
Mathematics 108	2	Mathematics 251	5
Mathematics 232	3	Physical Education 110	½
Physical Education 110	½	Physics 202	5
Physics 107	1	Social Science Elective	3
Physics 201	5		
Social Science Elective	3		
	17½		16½

Third Year

Biology 121	5	Biology 122	5
Biology Elective	2	Education 216	3
Education 215	3	Health 201	3
Health or Physical Education Elective	1	Physics Elective	6
Mathematics 352	3		
Physics Elective	3		
	17		16

Fourth Year

Chemistry Elective	2	Education 364	6
Education 384	3	Education 463	10
Physics Elective	6		
Elective	5		
	16		16

Recommended Curriculum for a Second Major in Physics

A student with a first major in some other department may take the following courses for a second major in Physics: Physics 201, 202, and 14 additional hours numbered above 202 as directed by the department.

Recommended Curriculum for a Minor in Physics

A student with a major and a minor in other departments may take the following courses for a minor in Physics: Physics 107, 201, 202, and 7 hours elective.

PHYSICS

(Recommended curriculum for a major in Physics without right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
Mathematics 107	3	Mathematics 108	2
Physical Education 110	½	Mathematics 113	3
Physics 107	1	Physical Education 110	½
Physics 131	5	Physics 132	5
Social Science 100	3	Social Science 101	3
Sociology 100	1	Sociology 101	1
	16½		17½

Second Year

Chemistry 111	5	Chemistry 112	5
English 211	3	English 212	3
Mathematics 232	3	Mathematics 251	5
Physical Education 110	½	Physical Education 110	½
Physics 201	5	Physics 202	5
	16½		18½

Third Year

Biology 121	5	Biology 122	5
Foreign Language	3	Foreign Language	3
Mathematics 352	3	Physics Elective	6
Physics Elective	3	Elective	2
Elective	2		
	16		16

Fourth Year

Physics Elective	6	Physcis Elective	3
Elective	10	Elective	13
	16		16

PHYSICS

LOWER DIVISION COURSES

Physics 107. (Formerly Physics 17.) Slide Rule Theory and Practice. **One hour.**

Designed to aid the student in doing arithmetical computations easily and rapidly.

Physics 131. Elementary Physics. **Five hours.**

Prerequisite: One unit each of high school algebra and plane geometry.

The fundamental ideas of mechanics; molecular physics; heat. Three lecture and four laboratory hours. Fee, $1.50.

Physics 132. Elementary Physics. **Five hours.**

Prerequisite: Physics 131.

Electricity; magnetism; wave motion; sound; light. Three lecture and four laboratory hours. Fee, $1.50.

Physics 201. (Formerly Physics 20 and part of Physics 21.) Mechanics, Molecular Physics and Heat. **Five hours.**

Prerequisite: Trigonometry.

Falling bodies; Newton's laws of motion and applications to practical problems; curvilinear motion; composition and resolution of forces; the laws of equilibrium and their application to various problems; work and energy; machines; momentum; elasticity; simple harmonic motion; hydrodynamics; heat and molecular physics including thermometry, pressure, expansion of solids, liquids, and gases; modern radiation theory. Three lecture and four laboratory hours. Fee, $1.50.

Physics 202. (Formerly Physics 22 and part of Physics 21.) Electricity, Magnetism, Wave Motion, Sound, and Light. **Five hours.**

Prerequisite: Physics 201.

Electrostatics; the nature of electricity; magnetism; Ohm's law; measurement of electrical quantities; sources of electrical energy; Lenz's law; inductance and capacity; alternating currents; electric waves and radio. Three lecture and four laboratory hours. Fee, $1.50.

Physics 203. (Formerly Physics 23.) Problems in General Physics. **Two hours.**

Prerequisites: Physics 201, 202, or equivalent.

Problems selected from topics in Physics 201 and 202. Two recitation hours.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Physics 300. (Formerly Physics 30.) Modern Physics. **Three hours.**

Prerequisites: Physics 201, Physics 202 or equivalent, Mathematics 251 or registration in Mathematics 251.

Historical introduction; alternating currents; electromagnetic theory of radiation; properties of moving charged bodies; the electron; kinetic theory of gases; thermionics; the photoelectric effect; x-rays and their appliactions. Three recitation hours.

Physics 301. (Formerly Physics 31.) Modern Physics. **Three hours.**
Prerequisite: Physics 300.

Bohr theory of spectra; periodic law and atomic structure; critical potentials; radio and television; radioactivity and isotopes; geophysics; astrophysics; relativity; specific heats; electrical resistance; high frequency sound waves; and recent development in physics. Three recitation hours.

Physcis 302. (Formerly Physics 32.) Introduction to Physical Optics. **Three hours.**

Prerequisites: Physics 201 and 202, or equivalent.

Wave motion; reflection and refraction; further study of lenses; the telescope; dispersion; facts concerning the spectrum; interference; diffraction; plane polarized light; the electromagnetic theory of light; the quantum theory; origin of spectra. Three recitation hours.

Physics 303. (Formerly Physics 33.) Heat. **Three hours.**

Prerequisites: Physics 201 and 202, or equivalent.

Historical review of theories and discoveries; thermometry; specific heats; thermal expansion; transfer of heat; first law of thermodynamics; radiation; change of state; continuity of state; introduction to thermodynamics; production of low temperatures; production of high temperatures. Three recitation hours.

Physics 304. (Formerly Physics 34.) Advanced Electricity and Magnetism. **Three hours.**

Prerequisites: Physics 201 and 202, or equivalent, and Mathematics 251.

Magnetism; the electric current; electrostatics; electrolysis; thermoelectricity; electromagnetics; alternating currents; electromagnetic radiation; conduction in gases; electrons and atoms. Three recitation hours.

Physics 305. Advanced Electricity and Magnetism Laboratory. **Two hours.**

Prerequisites: Physics 201 and 202.

Calibration and use of advanced electrical instruments; precision measurements of inductance, capacitance, resistance, and voltage; basic experiments on vacuum tubes; use of cathode ray oscilloscope. Four laboratory hours per week.

Physics 306. Advanced General Laboratory. **Two hours.**

Prerequisites: 132 or 202.

Largely for students majoring or minoring in physics. Consists of the performance and reporting of a carefully selected group of experiments considerably more advanced than in the elementary laboratories. The experiments will spread across the various branches of physics and cover ideas and techniques considered essential to the training of a well-rounded physicist. Four laboratory hours per week.

Physics 307. (Formerly Physics 36.) Electronics. **Three hours.**

Prerequisite: Physics 202 or equivalent.

Theory of thermionic tubes; amplifier circuit principles; photosensitive devices; rectifiers; principles of radio, radar and television. Three recitation hours. Fee, $1.50.

Physics 310. Special Problems in Physics. **One to three hours.**

Prerequisite: Physics 202 or equivalent.

Working out of special laboratory experiments; development of new equipment; or solution of special mathematical problems related to physics.

Physics 311. Special Problems in Physics. **One to three hours.**

This course is a continuation of Physics 310.

Physics 315. Radioactivity and Nuclear Physics. **Three hours.**

Prerequisite: Physics 202.

Natural radioactivity; radiation detectors; apparatus for induced radioactivity; Alpha rays; Beta rays; Gamma rays; neutrons; other particles; cosmic radiation; nuclear fission; applications of radioactivity to botany, chemistry, engineering, medicine, and minerology. Three recitations per week. Some experiments.

Physics 455. (Formerly Physics 301, also listed now as Mathematics 455.) Theoretical Mechanics. **Five hours.**

May be taken either in the Mathematics or Physics Department.

Prerequisites: Mathematics 352 or registration in Mathematics 352, and Physics 201 or 202.

Fundamental concepts of mechanics; rectilinear motion of a particle; curvilinear motion; particle dynamics from the point of view of energy; statics of a particle; statics of a rigid body; dynamics of a rigid body; constrained motion; oscillations; motion of aggregates of particles; deformable bodies and wave motion; mechanics of fluids.

Physics 456. (Also listed as Mathematics 456.) Vector Analysis and Its Physical Application. **Three hours.**

May be taken either in the Mathematics or Physics Department.

Prerequisites: Mathematics 352 and Physics 202.

The algebra and calculus of vectors. Applications of vector analysis to solution of problems in geometry and physics.

PSYCHOLOGY

Psychology 211. General Psychology. **Three hours.**

Preview of psychology; factors in development; motivation; emotions; learning; the management of learning; thinking; personality and individual differences; intelligence; vocational and employment psychology; getting along with people; psychology and social problems.

Psychology 212. Applied Psychology. **Three hours.**

A study of psychological factors in occupational choices and of applications in fields such as advertising, industry, law, medicine, and personnel work.

Psychology 308. Abnormal Psychology. **Three hours.**

A study of the nature, causes, and prevalence of disorders of sensory and motor activities, memory, emotions, intelligence, and personality.

ROARK AND SCIENCE BUILDING

SCIENCE

(Recommended curriculum for the training of teachers of the Sciences with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
Biology 121	5	Biology 122	5
Chemistry 111	5	English 102	3
English 101	3	Chemistry 112	5
Mathematics 107	3	Mathematics 113	3
Physical Education 110	½	Physical Education 110	½
Sociology 100	1	Sociology 101	1
	17½		17½

Second Year

Biology 229	3	Biology 325	3
Education 215	3	Education 216	3
English 211	3	English 212	3
History 246	3	History 247	3
Physical Education 110	½	Physical Education 110	½
Physics 201	5	Physics 202	5
	17½		17½

Third Year

Biology 335	2	Biology 345	2
Chemistry 310	5	Chemistry 212	5
Geology 301	3	Physics Elective	3
Physics Elective	3	Science 410	2
Science 471	2	Elective	5
Elective	2		
	17		17

Fourth Year

Education 384	3	Education 364	6
Health 201	3	Education 463	10
Health and Physical Education Elective	1		
Physics Elective	3		
Elective	6		
	16		16

Physics must be chosen by the student with the approval of the head of the department. Physics 131, 132, and 203 may be substituted for Physics 201 and 202.

NONSPECIALIZED SCIENCE

LOWER DIVISION COURSES

(Science 109 and 110 are not open to students who have completed laboratory courses in Physics and Chemistry. Science 111 and 112 are not open to students who have completed laboratory courses in biological sciences.)

Science 109. (Formerly Science 12 and 110.) Physical Science I. **Three hours.**

The purpose of this course is to present the field of the physical sciences, their nature and interpretation. It deals with the important topics in physics, chemistry, geology, and related subjects. Fee, $1.00.

Science 110. (Formerly Science 10 and 110.) Physical Science II. **Three hours.**

A continuation of Science 109. Fee, $1.00.

Science 111. (Formerly Science 11 and Biology 14a.) Biological Science I. **Three hours.**

The principles of biology as they apply to man; the maintenance, adaptation and perpetuation of his body; the history and development of man and his races; interrelationships of man and other organisms; effect of man and other organisms on community life. Two lecture and two laboratory hours. Fee, $1.00.

Science 112. (Formerly Biology 14b.) Biological Science II. **Three hours.**

A continuation of Science 111. Two lecture and two laboratory hours. Fee, $1.00.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Science 310. (Formerly Science 35.) History of Science. **Three hours.**

The development of scientific concepts through the ages; contribution of science to civilization; relations of scientific developments and various philosophies; biographical sketches. Three lecture hours.

Science 361. (Formerly Biology 26 and 261.) Nature Study I. **Three hours.**

Prerequisite: A major in Elementary Education.

Methods in teaching nature study and general science in grades one to six; the fundamental life processes, identification and economic importance of the common animal and plant life; studies of the earth and sky, including soil, rocks, weather, clouds, stars, constellations and physical phenomena; conservation. One lecture and four laboratory hours. Fee, $1.00.

Science 362. (Formerly Biology 26 and 262.) Nature Study II. **Three hours.**

A continuation of Science 361. One lecture and four laboratory hours. Fee, $1.00.

Science 410. Teaching of Physical Science in the High School. **Two hours.**

Prerequisite: A major in Physical Science.

Selection of textbooks, workbooks, manuals, etc.; organization of laboratory space and purchasing of materials and equipment; making simple equipment; securing free and inexpensive materials; preparation and presentation of work units; visual aids; demonstrations; test construction and administration; club-

work; specimen collection and preservation; observation in Model High School. Two lecture hours.

Science 471. (Formerly Biology 51.) Methods in Biology. **Two hours.**

Prerequisite: A major or minor in Biology.

Required of applicants for student teaching in Biology.

The sources, preparation, culture and use of biological materials for instruction in high schools; the construction, care and use of high school biological equipment; conduction of field trips. Four laboratory hours.

SOCIAL SCIENCE AREA

(Recommended curriculum for a major in the Area of Social Science with right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
*General Education Elective	3	*General Education Elective	3
Geography Elective	3	Health 100	2
Physical Education 110	½	Physical Education 110	½
Science 111	3	Science 112	3
Social Science 100	3	Social Science 101	3
Sociology 100	1	Sociology 101	1
		Elective	1 or 2
	16½		16½ or 17½

Second Year

Art 200	3	Education 216	3
Education 215	3	English 212	3
English 211	3	History 203	3
History 202	3	History 247	3
History 246	3	Music 271	3
Physical Education 110	½	Physical Education 110	½
Elective	2	Electives	1 or 2
	17½		16½ or 17½

Third Year

Commerce 230	3	Commerce 231	3
Government 211	3	***General Education Elective	3
Health 201	3	Government 212	3
History 340	3	History 344	3
History 498	3	History 499	3
Sociology 331	3	Sociology 332	3
	18		18

Fourth Year

Education 384	3	Education 364	6
Geography 471	3	Education 463	10
Health or Physical Education Elective	1		
History 448	3		
Social Science Elective	3		
Elective	3		
	16		16

* Select from Agriculture, Commerce, Home Economics, Industrial Arts, Foreign Language, Mathematics, or Military Science.

*** This elective should be from the field selected for general education in the Freshman year, the fine arts, or the natural sciences.

SOCIAL SCIENCE AREA

(Recommended curriculum for a major in the area of Social Science without right of teaching certificate)

First Year

First Semester	Hours	Second Semester	Hours
English 101	3	English 102	3
*General Education Elective	3	*General Education Elective	3
Geography Elective	3	Health 100	2
Physical Education 110	½	Physical Education 110	½
Science 111	3	Science 112	3
Social Science 100	3	Social Science 101	3
Sociology 100	1	Sociology 101	1
		Elective	1 or 2
	16½		16½ or 17½

Second Year

Art 200	3	English 212	3
English 211	3	English Elective	3
History 202	3	History 203	3
History 246	3	History 247	3
Physical Education 110	½	Music 271	3
Elective	5	Physical Education 110	½
		Elective	2
	17½		17½

Third Year

Commerce 230	3	Commerce 231	3
Government 211	3	***General Education Elective	3
Health 201	3	Government 212	3
History 340	3	History 344	3
History 498	3	History 499	3
Sociology 331	3	Sociology 332	3
	18		18

Fourth Year

Geography 471	3	Social Science Electives	6
Health or Physical Education Elective	1	Electives	10
History 448	3		
Social Science Elective	3		
Elective	6		
	16		16

* Select from Agriculture, Commerce, Home Economics, Industrial Arts, Foreign Language, Mathematics or Military Science.

*** This elective should be from the field selected for general education in the Freshman year, the fine arts, or the natural sciences.

GENERAL SOCIAL SCIENCE

Social Science 100. Contemporary Social Problems. **Three hours.**

Biological, psychological, and geographic factors in human development; culture; population; problems of the family; the nature and development of education; the organization and role of modern education; recreational institutions; religious institutions; health institutions, aesthetic insttutions; economic institutions and problems; the problems of government; alternative, economic and governmental systems; international relations.

Social Science 101. Contemporary Social Problems. **Three hours.**

A continuation of Social Science 100.

SOCIOLOGY

LOWER DIVISION COURSES

Sociology 100. (Formerly Sociology 10.) College Orientation. **One hour.**

The college and its functions; living in college; the development of efficient study habits; personal and family responsibilities; social relationships; vocational guidance.

Sociology 101. College Orientation. **One hour.**

A continuation of Sociology 100.

Sociology 200. (Formerly Sociology 20.) Social Understanding. **Three hours.**

The meaning of "social understanding"; the community and the community process; community surveys; the study of specific social problems, groups, and institutions as they relate to the community process.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Sociology 331. (Formerly Sociology 30.) Principles of Sociology. **Three hours.**

Field of sociology and its relation to other social science courses; relation of living conditions to life; the problem of finding and using leaders; social achievements; man's relation to his institutions and his responsibility for them; the family; religion; and morals.

Sociology 332. (Formerly Sociology 31.) Current Social Problems. **Three hours.**

The social and institutional impact of industrialism and secularism; economic, social, and biological problems in modern society; social wreckage.

Sociology 333. (Formerly Sociology 33.) Criminology, Penology and Reform. **Three hours.**

Causes of crime; heredity and environment; costs of crime; punishment and correction of criminals; special attention to juvenile delinquents and correctional methods.

SPANISH

A student may major in Spanish by taking a minimum of 24 hours in Spanish.

A student with a major and a minor in other departments may take 18 semester hours for a minor in Spanish.

LOWER DIVISION COURSES

Spanish 101. (Formerly Spanish 11). Elementary Spanish. **Three hours.**
Grammar; pronunciation; reading of easy Spanish.

Spanish 102. (Formerly Spanish 12.) Elementary Spanish. **Three hours.**
Prerequisite: Spanish 101 or one unit of high school Spanish.
A continuation of Spanish 101.

Spanish 201. (Formerly Spanish 21.) Intermediate Spanish. **Three hours.**
Prerequisites: Spanish 101 and 102, or two units of high school Spanish.
Review of grammar; intensive work on studies of Spanish speaking countries as a basis for spoken Spanish.

Spanish 202. (Formerly Spanish 22.) Intermediate Spanish. **Three hours.**
Prerequisite: Spanish 201 or three units of high school Spanish.
Foundation work for advanced study in literature and intensive study of spoken Spanish.

UPPER DIVISION COURSES

(Open to Junior, Senior, and Graduate Students)

Spanish 301. (Formerly Spanish 31.) The Spanish Novel. **Three hours.**
Prerequisite: Two years of college Spanish or the equivalent.
Reading of selected novels of the Golden Age and of the eighteenth century.

Spanish 302. (Formerly Spanish 32.) The Spanish Novel. **Three hours.**
Prerequisite: Spanish 301 or its equivalent.
Novels of the nineteenth and twentieth centuries.

Spanish 401. (Formerly Spanish 41.) Spanish Poetry. **Three hours.**
Prerequisite: Two years of college Spanish or the equivalent.
Selected poems by writers throughout the world using the Spanish medium.

Spanish 402. (Formerly Spanish 42.) Spanish Drama. **Three hours.**
Prerequisite: Spanish 401 or its equivalent.
Representative plays of the various schools of drama.

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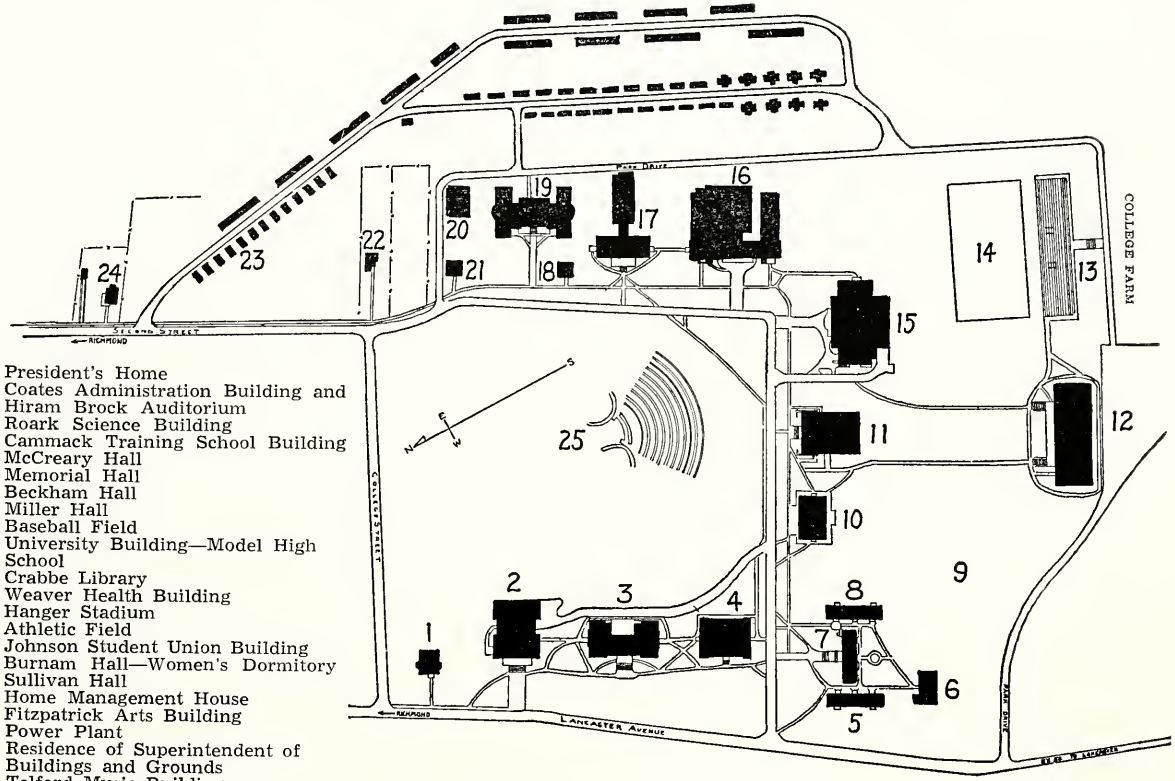
NOTES

NOTES



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EASTERN KENTUCKY REVIEW
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